DOCUMENT RESUME

ED 456 804 IR 020 836

TITLE	Intellectual Property Needs and Expectations of Traditional Knowledge Holders. WIPO Report on Fact-Finding Missions on Intellectual Property and Traditional Knowledge (1998-1999).
REPORT NO	WIPO-768E
ISBN	ISBN-92-805-0968-3
PUB DATE	2001-04-00
NOTE	326p.
AVAILABLE FROM	World Intellectual Property Organization, New York Coordination Office, 2, United Nations Plaza, Suite 2525, New York, NY 10017. Tel: 212-963-6813; Fax: 212-963-4801; e-mail: wipo@un.org; Web site: http://www.wipo.int; Electronic Bookshop Web site: http://www.wipo.int/ebookshop.
PUB TYPE	Books (010) -- Reports - Descriptive (141)
EDRS PRICE	EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Foreign Countries; Information Services; Information Sources; *Intellectual Property; International Organizations; Organizations (Groups); Ownership; Researchers; User Needs (Information); Users (Information)
IDENTIFIERS	*World Intellectual Property Organization

ABSTRACT

This report presents information compiled by the World Intellectual Property Organization (WIPO) from nine fact-finding missions conducted by WIPO in 1998 and 1999 on the intellectual property (IP) needs and expectations of holders of traditional knowledge. The fact-finding missions (FFMs) were designed to enable WIPO to identify the IP needs and expectations of traditional knowledge holders. The purpose of this report is to provide information to WIPO Member States, holders of traditional knowledge, including indigenous peoples, the private sector, intergovernmental and non-governmental organizations, academic and research institutions and other interested parties, on the IP needs and expectations of traditional knowledge holders expressed to WIPO during the fact-finding missions. The main body of the report is contained in three parts: "Framing the IP Needs and Expectations of Traditional Knowledge Holders"; "Identifying the IP Needs and Expectations of Traditional Knowledge Holders: Results of the Nine Fact-Finding Missions"; and "Summary, Reflections and Conclusions." Annexes to the report include the following: Contracting Parties of Treaties Administered by WIPO; Terms of Reference for FFMs; Table of Countries Visited; WIPO Interim Mission Reports; Recommendations and Resolutions on the Protection of Expressions of Folklore; List of States, Organizations and Persons Submitting Formal Comments on Draft Report; and Bibliography. (Contains 126 references.) (AEF)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 456 804

WORLD
INTELLECTUAL
PROPERTY
ORGANIZATION

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL IN MICROFICHE,
AND IN ELECTRONIC MEDIA FOR ERIC
COLLECTION SUBSCRIBERS ONLY,
HAS BEEN GRANTED BY

F. Gurry

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

2A

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

INTELLECTUAL PROPERTY NEEDS AND EXPECTATIONS OF TRADITIONAL KNOWLEDGE HOLDERS

WIPO Report on Fact-finding Missions on Intellectual Property and Traditional Knowledge (1998-1999)

2

BEST COPY AVAILABLE

IR020836

Cover artwork extracted from work entitled "Munupi Mural" by Susan Wanji Wanji, Munupi Arts and Crafts Association, Pirlangimpi Community, Melville Island, Australia. The artwork was used with the full express, full and informed consent of the artist. All rights reserved.

Intellectual Property Needs and Expectations of Traditional Knowledge Holders

WIPO Report on Fact-Finding Missions on Intellectual Property and Traditional Knowledge (1998-1999)

Geneva
April 2001

Table of Contents

Executive Summary 5
Acknowledgements 9
List of Abbreviations 13
Introduction 15
Methodology 19
Terminology 21

Part I. Framing the IP Needs and Expectations of Traditional Knowledge Holders

Introduction to Intellectual Property 31
Other Relevant Multilateral Institutions and Initiatives 49
Customary Laws and Protocols 57

Part II. Identifying the IP Needs and Expectations of Traditional Knowledge Holders: Results of the Nine Fact-finding Missions

FFM to the South Pacific 69
FFM to Eastern and Southern Africa 85
FFM to South Asia 101
FFM to North America 115
FFM to Central America 133
FFM to West Africa 145
FFM to the Arab Countries 159
FFM to South America - Mission to Peru 171
FFM to South America - Mission to Bolivia 185
FFM to the Caribbean Region 191

Part III. Summary, Reflections and Conclusions 207

Annexes

1. Contracting Parties of Treaties Administered by WIPO 243
2. Terms of Reference for FFMs 247
3. Table of Countries Visited 249
4. WIPO Interim Mission Reports 251
5. Recommendations and Resolutions on the Protection of Expressions of Folklore 319
6. List of States, Organizations and Persons Submitting Formal Comments on Draft Report 331
7. Bibliography 335

Executive Summary

This Report presents information compiled by the World Intellectual Property Organization (WIPO) from nine fact-finding missions conducted by WIPO in 1998 and 1999 on the intellectual property (IP) needs and expectations of holders of traditional knowledge (TK).[1]

The fact-finding missions (the FFMs) were designed to enable WIPO to identify, as far as possible, the IP needs and expectations of TK holders. While the needs of TK holders have been referred to in other international fora, there has been to date no systematic global exercise by international organizations to document and assess, first-hand, the IP-related needs of TK holders. As the United Nations specialized agency responsible for the promotion of the protection of IP, WIPO undertook the FFMs as part of a new programme of activities, initiated in 1998, to explore and study current approaches to, and future possibilities for, the protection of the IP rights of holders of TK.

The purpose of the Report is to provide information to WIPO Member States, holders of TK, including indigenous peoples, the private sector, intergovernmental and non-governmental organizations, academic and research institutions and other interested parties, on the IP needs and expectations of TK holders expressed to WIPO during the FFMs.

It is expected that the findings of this Report will be discussed with WIPO Member States and others with a view, particularly, to defining and guiding future WIPO activities on the protection of TK.

The main body of the Report is contained in the chapters **"Framing the Intellectual Property Needs and Expectations of Traditional Knowledge Holders"**, **"Identifying the Intellectual Property Needs and Expectations of Traditional Knowledge Holders"** and **"Summary, Reflections and Conclusions"**.

The first section of the chapter **"Framing the Intellectual Property Needs and Expectations of Traditional Knowledge Holders"** provides a basic and general introduction to the IP system, containing an overview of the different types of protection offered, as well as the management, transfer and enforcement of rights.

This section points out *inter alia* that IP is not limited to existing categories such as patents, copyright and trademarks. Indeed, the definition of IP in the Convention Establishing the World Intellectual Property Organization, 1967 makes it clear that "intellectual property" is a broad concept and can include productions and matter not forming part of the existing categories of intellectual property, provided they result, as the definition states, *"from intellectual activity in the industrial, scientific, literary or artistic fields."*[2] This part of the chapter also demonstrates that IP is evolutionary and adaptive. New advances in technology – information technology and biotechnology particularly – and changes in economic, social and cultural conditions require continuous appraisal of the system and at times adjustment and expansion, accompanied often by controversy. For example, the last few decades have seen the recognition of new or extended IP rights, such as *sui generis* forms of protection for plant varieties (in the 1950s and 1960s) and layout designs (topographies) of integrated circuits (1980s), and patent protection for biological material, plants and animals (in the 1970s and 1980s), copyright protection for computer software (1980s) and protection for databases and compilations of data (1980s and 1990s). The possible protection of tradition-based innovations and creations by the IP system, the subject of this Report, is a more recently articulated question.

---

[1] Terms such as "traditional knowledge", as used in this Report, are described in the "Terminoly" chapter.

[2] Article 2 (viii), Convention Establishing the World Intellectual Property Organization, 1967.

The second section of the chapter **"Framing the Intellectual Property Needs and Expectations of Traditional Knowledge Holders"** describes briefly other multilateral institutions and initiatives in which TK protection has emerged and is being addressed, while the final section presents information, with examples from the FFMs, of how customary laws and protocols are being applied to the protection of TK.

The chapter **"Identifying the Intellectual Property Needs and Expectations of Traditional Knowledge Holders"** contains individual, detailed reports on each of the nine FFMs. The earlier chapter on **"Methodology"** provides information on how the FFMs were planned, conducted and subsequently reported on.

The chapter on **Terminology** describes certain terms as they are used by WIPO in the Report. The Chapter seeks less to define such terms, than to provide some clarity and a common basis upon which the Report can be understood.

The **"Summary, Reflections and Conclusions"** chapter seeks to summarize, reflect upon and draw broad conclusions on what may be considered to be the main and most prevalent IP-related needs and expectations expressed to WIPO during the FFMs by TK holders and others with whom WIPO consulted. The main needs and expectations may be summarized as follows:

- The selection of an appropriate term or terms to describe the subject matter for which protection is sought.
- A clear definition or description of what is meant (and not meant) for IP purposes by the term or terms selected.
- The adjustment of expectations through effective awareness-raising as to the role and nature of IP protection in relation to TK.
- The prevention of the unauthorized acquisition of IPRs (particularly patents) over TK by documenting and publishing TK as searchable prior art, where so desired by the relevant TK holders.
- An analysis of how prior art is established for purposes of patent examinations in the context of TK.
- Greater awareness-raising on the IP system, particularly among sectors of society and communities unfamiliar with it, such as indigenous and local communities and Governmental offices not directly involved in IP law and administration.
- Greater understanding by the IP community of the perspectives, expectations and needs of TK holders.
- Facilitation of dialogue and contact between TK holders, the private sector, Governments, NGOs and other stakeholders to assist in development of modalities for cooperation between them, at community, national, regional and international levels.
- Enhanced participation by the national and regional IP offices and the IP community at large in TK-related processes in which IP issues are raised.
- Study of the relationship between collectivity of TK and IPRs, more particularly testing of options for the collective acquisition, management and enforcement of IPRs by TK holders' associations, including the applicability of collective management of IPRs to TK.
- Study of customary laws and protocols in local and traditional communities, including conclusions relevant for the formal IP system.

- In the shorter term, testing the applicability and use of existing IP tools for TK protection, through practical and technical community-level pilot projects and case studies; and, provision of technical information and training to TK holders and Government officials on possible options under the existing categories of IP for TK protection.
- In the longer term, the possible development of new IP tools to protect TK not protected by existing IP tools, the elaboration of an international framework for TK protection, using *inter alia* the WIPO-UNESCO Model Provisions for National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions, 1982 as a possible foundation, and the development of a *sui generis* system of "community" or "collective" rights to protect TK.
- Facilitating access to the IP system, to enable TK holders to use and enforce rights under the IP system.
- The provision of information, assistance and advice with respect to the enforcement of TK protection.
- The provision of legal/technical assistance with TK documentation, including information and advice on the IP implications of TK documentation.
- The provision of IP advice and assistance in respect of legislation, regulations, guidelines, protocols, agreements (including model terms), policies and processes on access to and benefit-sharing in genetic resources.
- Assistance and training for TK holders in the negotiation, drafting, implementation, and enforcement of contracts.
- The development and testing, with the close involvement of indigenous peoples and local communities, of "best contractual practices", guidelines and model clauses for contracts, as well as the provision of information on and protection against "unfair contract terms".
- Awareness-raising on the potential commercial value of TK and the development of tools for the economic valuation of TK.

It is evident that some of the needs and expectations conflict, or reflect competing policy objectives. WIPO has not attempted to mediate the needs or "resolve" conflicts, but rather to report as fully as possible on the information received from FFM informants. WIPO recognises that it cannot address all these needs and a collaborative effort by other relevant organizations and processes would be desirable. The needs as identified pose challenges for the entire IP community – national and regional IP offices, collective management societies, the private sector, NGOs, civil society, consumers, and the international community, including WIPO and its Member States. The needs and expectations as identified do not, therefore, represent a work program for WIPO, although they are reflected in WIPO's activities relating to TK in the 2000-1 biennium, which was developed based on the information obtained during the FFMs and other activities. These are described at the end of the **"Summary, Reflections and Conclusions"** chapter.

Further exploration of the role of IP in TK protection also requires a technical understanding of IP and application in the specifics of concrete uses of TK (in other words, it is more helpful to test the functionality of IP in relation to specific cases, than merely in a theoretical or ideological context). In addition, effective IP systems that protect and maintain TK will depend on a better understanding of the various systems of innovation and intellectual property (formal and customary) and, equally, upon the participation of all stakeholders, governments and local communities in the process. For its part, as the specialized United Nations agency responsible for the promotion of IP worldwide, WIPO is committed to continuing to address conceptual problems and undertake a practical and technical examination of the application of the IP system to various forms of TK in order to provide an informed and realistic analysis.

An efficient IP system that protects TK will promote continued creation and innovation based on that knowledge. IP is not only about conferring property rights. It is also about recognition of and respect for the contributions of human creators. From this perspective, IP has a very important role to play in protecting the dignity of holders of TK and, by recognizing property rights in relation to such knowledge, giving those holders a degree of control of its use by others. The protection of TK also benefits third parties, who are able to enjoy access to protected tradition-based innovation and creation that may not be collected, recorded, or find channels of distribution without IP protection.

The FFMs have shown the richness and diversity of TK on a global scale, both in terms of its inherent creativity and as potential subject matter for protection. The IP system cannot, however, respond fully to all the needs of TK holders. Many of the problems encountered by TK holders are less "legal" than "operational" – TK holders (as do some other sectors of society) often lack the know-how and financial resources to take advantage of the IP system, whether in its present or in an evolved form, and they need support in this respect. There are nevertheless certain conceptual difficulties. However, the fact that existing standards of IP may not be in perfect harmony with elements of TK worthy of protection, should not be seen as an insuperable obstacle. IP has consistently evolved to protect new subject matter, such as software and layout-designs, the emergence of which was unforeseeable even twenty years earlier. Copyright protection has been extended to the digital environment. IP is now moving forward to protect databases. Given its evolutionary and adaptive nature, it is not inconceivable that IP principles might provide effective protection for traditional knowledge.

Acknowledgements

This Report is the outcome of nine fact-finding missions (FFMs) to various regions of the world which WIPO undertook from May 1998 to November 1999. These missions were made possible through the active support and advice of numerous individuals and institutions, both governmental and non-governmental. WIPO wishes to thank all those who supported the FFMs, who are too numerous to recount individually.

Most of the information included in this Report has been generously provided to WIPO by holders of traditional knowledge, innovations and culture, including indigenous peoples. This information constitutes the most important and valuable part of this Report and WIPO wishes to thank in particular the holders of traditional knowledge who shared and contributed their knowledge, experiences and wisdom, and for the trust, confidence and cooperation which their contributions imply.

In preparing the reports of each of the FFMs in the chapter entitled "Identifying the Intellectual Property Needs and Expectations of Traditional Knowledge Holders: Results of the Nine Fact-finding Missions", WIPO requested several persons to review and comment on drafts of the reports, or parts thereof, for factual accuracy, currency and completeness and any other comments. We wish to thank all those concerned for their assistance in ensuring that the information contained in the Report is as accurate and up-to-date as possible. They are[1]:

FFM to the South Pacific: Mr. Stephen Gray, Lecturer, Law Faculty, Northern Territory University, Darwin, Australia; Ms. Lassity Martin, Coordinator, House of Aboriginality Project, Macquarie University, New South Wales, Australia; Ms. Sonia Smallacombe, Manager, Indigenous Cultural and Intellectual Property Task Force, Aboriginal and Torres Strait Islander Commission, Australia (ATSIC), Canberra, Australia; Mr. Maui Solomon, Barrister, Molesworth Chambers, Wellington, New Zealand; Ms. Maria Te Aranga Tini, Trustee, Kimihauora Charitable Trust, Mount Maunganui, New Zealand; Ms. Kesaia Tabunakawai, Wainimate, Suva, Fiji; and, Dr. Jacob Simet, Executive Director, National Cultural Commission, Port Moresby, Papua New Guinea.

FFM to Eastern and Southern Africa: Dr. Donna Kabatesi, Director, "Traditional and Modern Health Practitioners Together Against Aids" (THETA), Kampala, Uganda; Mr. Axel Thoma, Coordinator of the Working Group of Indigenous Minorities in Southern Africa (WIMSA), Windhoek, Namibia; Mr. Cyril Lombard, CRIAA SA-DC, Windhoek, Namibia; Mr. Roger Chennells, Attorney, Chennells and Albertyn, Stellenbosch, South Africa; Mr. Nigel Crawhall, the Indigenous Peoples of Africa Coordinating Committee (IPACC), Cape Town, South Africa; and, Ms. Sibongile Pefile, Member, Research Group for Traditional Medicines, University of Cape Town, Cape Town, South Africa.

---

[1] The titles and affiliations of the persons listed here are those at the time at which their contributions were received.

FFM to the Caribbean: Mr. Macsood Hoosein, Iwokrama International Centre for Rain Forest Conservation & Development, Georgetown, Guyana; Mr. Bernard Jankee, Director, African Caribbean Institute of Jamaica, Institute of Jamaica, Kingston, Jamaica; Ms. Gladys Alicia L. Young, Legal Unit, Ministry of Foreign Affairs and Foreign Trade, Kingston, Jamaica; and, Ms. Sharon Le Gall, Attorney, Patent and Trade Mark Agent, Champ Fleurs, Trinidad and Tobago.

FFM to South Asia: Dr. D. M. Karunaratna, Director, National Office of Intellectual Property, Ministry of Internal and International Commerce and Food, Colombo, Sri Lanka; Prof. Chandra Wikramagamage, Director General, Academy of Sri Lankan Culture, Colombo, Sri Lanka; Dr. R. V. Vaidyanatha Ayyar, Secretary, Government of India, Ministry of Human Resource Development, Department of Culture, New Delhi, India; Dr. Anil K. Gupta, Coordinator, SRISTI and Honeybee Network, Centre for Management in Agriculture, Indian Institute of Management, Ahmedabad, India; Mrs. P. V. Valsala G. Kutty, Deputy Secretary, Department of Education, Ministry of Human Resource Development, New Delhi, India; Dr. R. A. Mashelkar, Director General, Council of Scientific and Industrial Research, New Delhi, India; Dr. N. L. Mitra, Director, National Law School of India University, Bangalore, India; Dr. P. Usha Sarma, Centre for Biochemical Technology, New Delhi, India; Dr. Darshan Shankar, Director, Foundation for the Revitalization of Local Health Traditions, Bangalore, India; Dr. M. S. Swaminathan, Director, M. S. Swaminathan Research Foundation, Chennai, India; and, Dr. M. A. Kamal, Joint Secretary, International Trade and Organizations, Ministry of Commerce, Dhaka, Bangladesh.

FFM to West Africa: Professor Charles Wambebe, Director General, Nigerian Institute for Pharmaceutical Research and Development (NIPRD), Abuja, Nigeria; Dr. S.O Williams, President, Nigerian Folklore Society, Lagos, Nigeria (now, Director General of the Nigeria Copyright Commision); Professor K. Oppong-Boachie, Director, Centre for Scientific Research into Plant Medicine (CSRPM), Mampong, Ghana; and Professor J.H. Kwabena Nketia, Director, International Center for African Music and Dance (ICAMD), University of Ghana, Legon.

FFM to North America: Prof. Russell Barsh, Associate Professor, The University of Lethbridge, Lethbridge, Canada, and Engelberg Center for Innovation Law, Institute of Law and Society, New York University, New York, USA; Mr. Preston Hardison, , Coordinator, Biodiversity Information Network (BIN21), Seattle, Washington, USA; Mr. Allan Morin, Metis Nation of Saskatchewan, Saskatoon, Canada; Mrs. Nita Morven, Researcher, Ayuukhl Nisga'a Department, Nisga'a Tribal Council, New Aiyansh, Canada.

FFM to the Arab Countries: Mr. Ali Hussein Al-Lawati, Director, Department of Plant Production Research, Directorate General of Agricultural Research, Ministry of Agriculture and Fisheries, Mucat, Oman; Ms. Amna Rashid J. Al-Hamdan, Head, Projects and Fieldwork Studies Section, G.C.C. Folklore Center, Doha, Qatar; Dr. Ahmed Aly Morsi, Professor of Egyptian and Arabic Folklore, Cairo University, Cairo, Egypt; Dr. Asaad Nadim, National Art Development Industries of Mashrabeya, Cairo, Egypt; Mr. Mohamed Kheireddine Abdel Ali, Director General, OTPDA (*Organisme Tunisien de Protection des Droits d'Auteurs*), Tunis, Tunisia.

FFM to South America

Peru: Mr. Manuel Ruiz Muller, Programme of International Affairs, Biological Diversity, Peruvian Society of Environmental Law, Lima, Peru.

Bolivia: Ms. Erika Duenas, Intellectual Property Director of the Vice-Ministry of International Economic Relations and Integration (Ministry of Foreign Affairs).

FFM to Central America: Mr. Atencio Lopez, *Asociación Napguana*, Panama City, Panama.

However, any errors are the sole responsibility of WIPO.

In July 2000, this Report was made available in draft form for public comment. The Report was widely distributed in paper form, and was also posted on WIPO's website. The commenting period closed formally on December 15, 2000, but all comments received before the Report went to press in April 2001 were taken into account. A list of the States, organizations and individuals who commented on the draft Report is contained in Annex 6. This revised Report incorporates as far as possible all the comments received. Those comments received electronically are available on WIPO's website at http://www.wipo.int/traditionalknowledge/comments/index.html.

The comments were received on the draft Report contributed to and enriched this Report. WIPO greatly appreciates the efforts of those who provided comments.

Unless otherwise indicated, the information contained in this Report is current as at July 2000, when the draft Report was made available. The tables showing membership of treaties at the beginning of the sections on each of the fact-finding missions are current as at March 2001.

List of Abbreviations

CBD	Convention on Biological Diversity, 1992
FAO	Food and Agriculture Organization
FFM	Fact-finding mission
ILO	International Labor Organization
IMR	Interim Mission Report
IUCN	The World Conservation Union
IP	Intellectual Property
IPRs	Intellectual Property Rights
NGO	Non-Governmental Organization
OHCHR	Office of the High Commissioner for Human Rights
PGR	Plant Genetic Resources
PGRFA	Plant Genetic Resources for Food and Agriculture
PIC	Prior Informed Consent
TK	Traditional Knowledge
TRIPS Agreement	Agreement on Trade-Related Aspects of Intellectual Property Rights, 1994
UNCCD	United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, 1994
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNEP	United Nations Environment Programme
WGIP	Working Group on Indigenous Populations
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WIPO Convention	Convention Establishing the World Intellectual Property Organization
WTO	World Trade Organization
WWF	World Wildlife Fund

Introduction

The World Intellectual Property Organization (WIPO): WIPO is one of the specialized agencies of the United Nations (UN) system of organizations. WIPO's mandate is the promotion of the protection of intellectual property (IP) throughout the world through cooperation among States and, where appropriate, in collaboration with any other international organization.[1] The term "intellectual property" is defined in the WIPO Convention[2] to include rights relating to:

- literary, artistic and scientific works;
- performances of performing artists, sound recordings, and broadcasts;
- inventions in all fields of human endeavor;
- scientific discoveries;
- industrial designs;
- trademarks, service marks, and commercial names and designations;
- protection against unfair competition; and,
- all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

WIPO has currently 176 Member States, a list of which is contained in Annex 1. WIPO's headquarters are in Geneva, Switzerland. WIPO's main activities include:

- facilitating the conclusion of new international treaties and the modernization of national legislation;
- administration of more than twenty international treaties in the fields of copyright, related rights, patents, industrial designs and marks;
- providing technical advice and assistance to developing countries as part of an extensive development cooperation program;
- the assembly and assimilation of information and advice to a diverse range of parties; and,
- the maintenance of services for facilitating the obtaining of protection of inventions, marks and industrial designs for which protection in several countries is desired, such as the Patent Cooperation Treaty, 1970, the Hague Agreement Concerning the International Deposit of Industrial Designs, 1925, and the Madrid Agreement Concerning the International Registration of Marks, 1891, and the Protocol Relating to that Agreement, 1989.

Many of the international treaties administered by WIPO set out internationally agreed rights and common standards for their protection in the various fields of IP. These treaties have been negotiated and adopted by Member States which constitute "unions" for each treaty. The basic premise of these treaties is the simplification of the international intellectual property administration and enforcement system. Intellectual property rights (IPRs) are limited territorially and can only be exercised within the jurisdiction of a country granting these rights. With the increasing interdependency of countries, membership of the treaties makes it possible for each member country to agree to grant to nationals of other countries in the union the same protection as they grant to their own nationals as well as to follow certain common rules, standards and practices.[3]

Certain of the treaties (such as the Patent Cooperation Treaty, 1970) establish mechanisms whereby protection can be obtained in several countries (the so-called "global protection treaties"). See further under "Introduction to Intellectual Property" in the chapter on "Framing the Intellectual Property Needs and Expectations of Traditional Knowledge Holders" below.

WIPO's Work on the Protection of Traditional Knowledge: In November 1997, the Global Intellectual Property Issues Division (the Global Issues Division) was established by the then newly elected Director General, Dr. Kamil Idris. The Global Issues Division was created to enable WIPO to remain at the forefront of global IP developments by responding to three challenges facing the IP system in a rapidly changing world. These challenges were identified as:

- accelerating technological advancement;
- integration of the world economical, ecological, cultural, trading and information systems; and
- the growing relevance of IPRs.

The Division's first program of activities was approved by WIPO's Member States as part of the WIPO Program and Budget for the 1998-1999 biennium.[4] The program's overall objective is to identify key areas where economic, technological, cultural and social change may impact on the IP system and to consider how such impact should be explored and addressed by WIPO and its Member States. The program's findings are expected to provide input and resources for policy formulation and for use in WIPO's other activities, such as in the areas of development cooperation and, possibly, progressive development. As the universality of IPRs calls for the exploration of new ways in which the IP system can serve as an engine for social, cultural, economic and technological progress of the world's diverse populations, one of the areas identified for exploration in the 1998-1999 biennium was the needs and expectations of groups which have until now had little or incomplete exposure to the IP system. The first such group identified were holders of traditional knowledge, innovations and culture (together referred to in this Report as "traditional knowledge" or "TK" - see discussion in the Chapter on "Terminology"). The main objective of the new WIPO activities in respect of traditional knowledge under the WIPO Program and Budget for 1998-1999 was *"to identify and explore the intellectual property needs and expectations of new beneficiaries, including the holders of indigenous knowledge and innovations, in order to promote the contribution of the IP system to their social, cultural and economic development"* (Main Program 11, Program and Budget 1998-1999).

During the 1998-1999 biennium, WIPO took an exploratory approach to its new activities on the IP aspects of TK protection. WIPO's program recognized that basic conceptual groundwork and systematic data collection are required to assess the IP aspects of the protection of TK, and to identify the scope of future work in a way which reflects the interests of all relevant stakeholders. To this end a range of activities was carried out under Main Program 11 of the WIPO Program and Budget, including:

- between June 1998 and November 1999, WIPO conducted 9 fact-finding missions (FFMs) to 28 countries in the South Pacific, Southern and Eastern Africa, South Asia, North America, Central America, West Africa, the Arab countries, South America and the Caribbean;
- in cooperation with the United Nations Educational, Social and Cultural Organization (UNESCO), WIPO organized four regional consultations on the protection of expressions of folklore, which were held for African countries in Pretoria, South Africa (March 1999), for countries of Asia and the Pacific region in Hanoi, Vietnam (April 1999); for Arab countries in Tunis, Tunisia (May 1999); and for Latin America and the Caribbean in Quito, Ecuador (June 1999)[5];
- in July 1998 and November 1999, WIPO organized two Roundtables to facilitate an exchange of views among policymakers, indigenous peoples and other holders of TK on the more effective application of the IP system for the protection of traditional and indigenous knowledge;[6]
- the interdisciplinary nature of the subject matter involved made it necessary for WIPO to participate in other international fora and meetings such as on food security, agriculture, the environment, indigenous populations, sustainable development, trade, culture and biological diversity. These were mostly orga-

nized by intergovernmental agencies within the UN system and certain national, regional and non-governmental organizations. Several of these fora have recently highlighted the IP aspects of TK and requested technical information from and cooperation with WIPO;

- WIPO also undertook, in cooperation with the United Nations Environment Programme (UNEP), an On-site Documentation Project on the Role of Intellectual Property Rights in the Sharing of Benefits Arising from the Use of Traditional Knowledge, Innovations and Creativity and Associated Biological Resources. This project produced case studies which WIPO and UNEP submitted to the fifth Conference of the Parties to the Convention on Biological Diversity, 1992 (the CBD) in May 2000.

The Objectives of the Fact-finding Missions: The FFMs were designed to enable WIPO to identify, as far as possible, the IP needs and expectations of TK holders. While the needs of TK holders have been referred to in other international fora, there has been to date no systematic global exercise by international organizations to document and assess, first-hand, the IP-related needs of TK holders. As the United Nations specialized agency responsible for the promotion of the protection of IP, WIPO undertook the FFMs as part of its explorative study of current approaches to, and future possibilities for, the protection of the IP rights of holders of TK.

This Report: This Report presents the information compiled from the FFMs and an analysis of the IP needs and expectations of TK holders that were expressed to WIPO. Relevant information from WIPO's other activities in this area, as described above, is also integrated into the Report.

The purpose of the Report is to provide information to WIPO Member States, holders of TK, including indigenous people, the private sector, intergovernmental and non-governmental organizations, academic and research institutions and other interested parties on the IP needs and expectations of TK holders expressed to WIPO during the FFMs.

The main body of the Report is contained in the chapters on "**Framing the Intellectual Property Needs and Expectations of Traditional Knowledge Holders**", on "**Identifying the Intellectual Property Needs and Expectations of Traditional Knowledge Holders**" and the chapter containing the "**Summary, Reflections and Conclusions**".

The first part of the chapter on "**Framing the Intellectual Property Needs and Expectations of Traditional Knowledge Holders**" provides a basic and general introduction to the IP system, containing an overview of the different types of protection offered, as well as the management, transfer and enforcement of rights. The second part of the chapter describes briefly other multilateral institutions and initiatives in which TK protection has emerged and is being addressed, while the final section presents information, with examples, of how customary laws and protocols are being applied to the protection of TK.

The chapter on "**Identifying the Intellectual Property Needs and Expectations of Traditional Knowledge Holders**" contains individual, detailed reports on each of the 9 FFMs. The decision to report on each mission separately was informed by the need to preserve the integrity of the information arising from the regions. This also creates a framework for highlighting similarities and differences not only between communities within countries in a region, but also between regions. The information is, however, presented according to a similar format in each section to facilitate comparison between the missions. The format is broadly as follows: Terminology and Subject Matter; Objectives of TK protection; Benefits and Beneficiaries of TK Protection; Documentation; Means of Protecting TK; Management and Enforcement of Rights and Interests in TK; and, General.

The chapters on "**Methodology**" and "**Terminology**" provide information on how the FFMs were conducted and on the use of certain terms in the Report. The Methodology Chapter deals with how the FFMs were planned, conducted and subsequently reported on. It also, importantly, highlights the role of WIPO's Member States and the Governments of the countries visited in planning and conducting of the missions. There is no consistency in the usage of certain terms in the area of TK and the chapter on Terminology describes certain of the terms as they are used by WIPO in the Report and in its work. The Chapter seeks less to define such terms, than to provide some clarity and a common basis upon which the Report can be understood.

It is expected that the findings of this Report will be discussed with WIPO Member States and others with a view, particularly, to defining and guiding future WIPO activities on the intellectual property protection of traditional knowledge.

Notes

---

[1] Article 3(i), Convention Establishing the World Intellectual Property Organization, 1967. The Convention entered into force in 1970.

[2] Article 2(viii).

[3] For further information on WIPO, please see WIPO, *Intellectual Property Reading Material* (WIPO Publication Number 476) and the WIPO website at www.wipo.int.

[4] The program of activities of the Global Issues Division is contained in Main Program 11 of the WIPO Program and Budget for 1998-1999. The Program and Budget may be viewed on the WIPO website www.wipo.int.

[5] The Recommendations, Resolutions and other documents from these Consultations are available from the International Bureau of WIPO and the WIPO website www.wipo.int.

[6] The Lists of Participants, Programs, and Papers of these Roundtables are available from the International Bureau of WIPO and the WIPO website www.wipo.int.

Methodology

The variety of cultures, traditions, and beliefs encountered over the course of the FFMs impressed upon WIPO the diverse local contexts within which TK is created and thrives. In developing a plan for each FFM, a basic foundational methodology was adapted to meet the specific requirements of the regions, countries, and communities. What follows is a broad outline of the general methodology used in planning and undertaking each FFM.

The overall objective of the FFMs was to "*identify and explore the intellectual property needs and expectations of new beneficiaries, including the holders of indigenous knowledge and innovations, in order to promote the contribution of the intellectual property system to their social, cultural and economic development.*"

While taking into account the constraints of WIPO's resources, it was considered desirable that as many regions as possible be visited. Nine FFMs were conducted to the South Pacific, Southern and Eastern Africa, South Asia, North America, Central America, West Africa, the Arab Countries, South America and the Caribbean. The advice and interest of WIPO's Member States (through the national IP offices and their Permanent Missions to the United Nations in Geneva), the advice of the WIPO Regional Bureaus and that of the regional and local coordinators, on the one hand, and prevailing political and other conditions of access, on the other, combined to identify which countries were visited. A total of 28 countries were visited, and approximately 3000 persons met with or visited in approximately 60 cities, towns and villages. In so far as the individuals and institutions with whom WIPO met are concerned, these were identified on the basis of suggestions made by academics, non-governmental experts and indigenous and local community organizations from around the world, the personal contacts and knowledge of WIPO staff, as well as the advice of Government officials (see Annex 3 "Table of Countries Visited").

The consultations, meetings, interviews and visits were organized prior to the commencement of each mission. FFM activities were either arranged by WIPO staff directly, or by the national IP office or other Government departments of the relevant member states on behalf of WIPO. A representative of the national IP office or other Government department accompanied WIPO staff on most of the FFM activities. In some cases, a local coordinator within each country was requested by WIPO to assist with the logistical planning required for each mission. This included, *inter alia*, venue selection, participant selection, and general format of the activities.

Where possible, WIPO's "Terms of Reference" for the FFMs were sent to all those with whom WIPO met prior to the commencement of the missions. This was to ensure that the purpose, nature and expected output of the FFMs were clearly understood by informants before they met with WIPO staff. The Terms of Reference are reproduced in Annex 2.

The primary methods of data collection were:

- the gathering of documents;
- semi-structured interviews; and
- participatory observations involving the informants.

These three procedures were chosen to maximize the diversity of information that could be gathered while minimizing researcher bias. This desire was particularly relevant in the decision to use semi-structured interview methods, as opposed to completely structured interviews. A structured interview uses a predetermined set of questions to elicit information from the subjects, while a semi-structured interview develops questions which build from previous answers. Thus, the semi-structured interviews were organized to follow two 'interview threads' in order to provide some common area for comparative analysis across the various geographic regions; however, the precise questions and format of the interview was adapted to the local context of each informant.

The interview threads centered upon the needs, rights, and expectations of holders of TK now and in the future. Specifically, one thread focused upon the existing situation by exploring topics such as the informant's knowledge of the current formal IP system, gaps in the current system with respect to TK, effective protection measures currently in place for TK, and related formal instruments which affect the current state of traditional practices. The second thread involved the exploration of future possibilities for the protection of the IP rights of TK holders. Issues that were raised under this thread concerned, *inter alia*, informants' future expectations for IP protection, existing forms of TK that could be protected by IP regimes, and what new IP rights systems might meet the needs and expectations raised by informants.

The primary output of the FFMs is this Report. However, after each FFM, an Interim Mission Report (IMR) was produced and disseminated to all individuals, organizations, and Government officials with whom WIPO met during the relevant FFM. The IMR's constituted factual accounts of WIPO's activities during each FFM. Copies of the IMRs were also made widely available to Government representatives of WIPO's Member States, indigenous and local communities, organizations and individuals in other regions and are published on WIPO's web site at www.wipo.int. The IMRs are contained in Annex 4.

WIPO recognizes that the persons with whom it consulted and met are not representative of all TK holders and other stakeholders. The availability of resources and the need to plan and complete all nine FFMs within the 1998-1999 biennium, limited the number of countries WIPO could visit, the time it could spend in each country and the extent to which it could travel within countries to consult with people. That said, WIPO hopes that this Report serves, at the very least, as a useful basis for further work by WIPO and others in this area.

Terminology

With any discussion, the importance of establishing a common framework of understanding is vital for productive dialogue. One of the complicating factors of any discussion on TK is not so much the lack of options for appropriate terminology, but rather the diverse meanings and connotations associated with the existing options. As will be discussed below and as was found on the FFMs, many of the words used to describe concepts in this field have different meanings in different regions. There are three general complications which arise when utilizing terminology related to TK:

Context: The inability to translate the linguistic context a word enjoys in one language to another is particularly troublesome. Since the issues involved have had decades, if not centuries, of domestic use, the associated terminology has often developed very specific connotations in specific contexts.

Absence of appropriate translation: For some concepts, the term applied by holders of traditional knowledge in their native language has no correspondence in other languages, because of the unique development of the concept in that tradition. The result is the forced translation of a term to fit the constraints of the target language, like a square peg in a round hole.

Non-standard usage: Even within a single language, the meaning attributed to a certain term by speakers from different regions can have vastly different meanings. These differences may arise from the implied meaning of the term, or the perceived distinction between two terms. Another complication is the scope attributed to certain terms – for example, does "traditional knowledge" subsume "indigenous knowledge", or are the two terms equivalent?

This chapter claims neither to resolve these linguistic differences, nor offer a standardized formulation for the use of these terms in the future. This chapter seeks only to describe the ways in which certain terms are used in this Report. These terms are: "biological diversity", "expressions of folklore", "heritage", "indigenous knowledge", "intellectual property", "*sui generis*", "traditional knowledge", and "traditional knowledge holder". These terms appear frequently in this Report, and thus an understanding of how they are used is key to understanding the Report.

In addition to these terms, certain comments on the Draft Report suggested additional terms whose meanings could be discussed, perhaps in follow-up work. For example, in its comment on the Draft Report, the Government of Canada suggested that the Report may have benefited from a discussion of the meaning of the term "protection", as the term is used in relation to "the protection of TK". The comment states: "Protection can have several different meanings, such as preserving, promoting wider use, controlling use, preventing misuse, or channeling a proper share of benefits to TK holders."[1]

In another comment, it is suggested that it would be helpful to investigate the meanings of words such as "property", "ownership", "custodianship" and "stewardship".[2] A comment also suggested that the term and concept "indigenous intellectual property" should be used more.[3] These are all useful suggestions.

As certain comments on the Draft Report point out, it is clear that future discussions on intellectual property and TK will require, at least, shared understandings of what the relevant terms describe and what subject matter is covered by them.[4]

Biological Diversity (also Biodiversity)

The term biological diversity is used by various groups and organizations to refer to the multitude of unique species, and varieties within species, present in various ecosystems throughout the world. The best expression of this term in the international context is probably provided by Article 2 of the Convention on Biological Diversity, 1992 (the CBD), which defines the term as the *"variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems."*

Expressions of Folklore

WIPO uses the term "expressions of folklore" in the sense in which it is used in the WIPO-UNESCO Model Provisions for National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and other Prejudicial Actions, 1982 (the "Model Provisions"). Section 2 of the Model Provisions provides that "expressions of folklore" are understood as productions consisting of characteristic elements of the traditional artistic heritage developed and maintained by a community in the country or by individuals reflecting the traditional artistic expectations of such a community.

Only "artistic" heritage is covered by the Model Provisions. This means that, among other things, traditional beliefs, scientific views (e.g. traditional cosmogony) or merely practical traditions as such, separated from possible traditional artistic forms of their expression, do not fall within the scope of the proposed definition of "expressions of folklore." On the other hand, "artistic" heritage is understood in the widest sense of the term and covers any traditional heritage appealing to our aesthetic sense. Verbal expressions, musical expressions, expressions by action and tangible expressions may all consist of characteristic elements of the traditional artistic heritage and qualify as protected expressions of folklore.

The Model Provisions also offer an illustrative enumeration of the most typical kinds of expressions of folklore. They are subdivided into four groups according to the forms of the "expressions," namely expressions by words ("verbal"), expressions by musical sounds ("musical"), expressions of the human body ("by action") and expressions incorporated in a material object ("tangible expressions"). The first three kinds of expressions need not be "reduced to material form," that is to say, the words need not be written down, the music need not exist in musical notation and the dance need not exist in choreographic notation. On the other hand, tangible expressions by definition are incorporated in a permanent material, such as stone, wood, textile, gold, etc. The Model Provisions also give examples of each of the four forms of expressions. They are, in the first case, "folk tales, folk poetry and riddles," in the second case, "folk songs and instrumental music," in the third case, "folk dances, plays and artistic forms of rituals," and in the fourth case, "drawings, paintings, carvings, sculptures, pottery, terra-cotta, mosaic, woodwork, metalware, jewelry, basket weaving, needlework, textiles, carpets, costumes; musical instruments; architectural forms."

WIPO is aware that the term "folklore" is believed to have a pejorative meaning by many persons, particularly in certain regions. As this is, however, the term that has been used at the international level for many years, WIPO has retained it for the present.

Heritage

The term "heritage" appears within the context of, for example, the "heritage of indigenous peoples". WIPO understands "heritage of indigenous peoples" (and other peoples) to refer broadly to the items described in paragraphs 11 and 12 of the Draft Principles and Guidelines for the Protection of the Heritage of Indigenous People, 1995, elaborated by the Special Rapporteur of the Sub-Commission on the Prevention of Discrimination and Protection of Minorities[5], Dr. Erica Irene Daes. This document is currently under revision. However, paragraph 12 currently provides that:

> *"The heritage of indigenous peoples includes all moveable cultural property as defined by the relevant conventions of UNESCO; all kinds of literary and artistic works such as music, dance, song, ceremonies, symbols and designs, narratives and poetry; all kinds of scientific, agricultural, technical and ecological knowledge, including cultigens, medicines and the rational use of flora and fauna; human remains; immoveable cultural property such as sacred sites, sites of historical significance, and burials; and documentation of indigenous peoples' heritage on film, photographs, videotape or audiotape."*

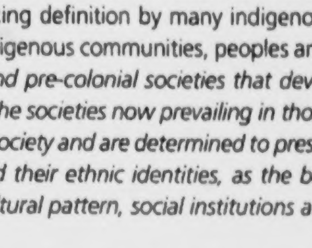
Indigenous Knowledge

"Indigenous knowledge" is understood in at least two different ways. First, it is used to describe knowledge held and used by communities, peoples and nations that are "indigenous". The notion "indigenous peoples" has been the subject of considerable discussion and study. The description of the concept "indigenous" in the Study of the Problem of Discrimination Against Indigenous Populations[6], prepared by Special Rapporteur of the United Nations Sub-Commission on Prevention of Discrimination and Protection of Minorities, Mr. J. Martínez Cobo, is regarded as an acceptable working definition by many indigenous peoples and their representative organizations. The Study understands indigenous communities, peoples and nations as *"those which, having a historical continuity with 'pre-invasion' and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing in those countries, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identities, as the basis of their continued existence as peoples, in accordance with their own cultural pattern, social institutions and legal systems"*.

In referring to this description of "indigenous peoples", the National Institute for the Defense of Competition and Intellectual Property Protection of Peru (INDECOPI), in its comment on the Draft Report, queries its acceptability: "It would be interesting to know the opinion of the historians and to know if it is acceptable, for example, the definition that is made to the term 'indigenous'".[7] Another comment also queried the limitation of the description to "pre-invasion" societies. [8]

In this sense, "indigenous knowledge" would be the traditional knowledge of indigenous peoples. Indigenous knowledge is therefore part of the traditional knowledge category, but traditional knowledge is not necessarily indigenous. That is to say, indigenous knowledge is traditional knowledge, but not all traditional knowledge is indigenous (see figure 1). [9]

FIGURE 1



On the other hand, "indigenous knowledge" is also used to refer to knowledge that is itself "indigenous". Dictionaries define "indigenous" as:

> "originating or occurring naturally (in a country, region etc.); native; innate (to); inherent (in)"[10]; and "(Esp. of flora and fauna) produced naturally in a region; belonging naturally (to soil etc.)".[11]

Or, as one of the comments on the Draft Report put it: "'(I)ndigenous' means belonging to, or specific to, a particular place."[12]

In this sense, the terms "traditional knowledge" and "indigenous knowledge" may be interchangeable.[13]

Intellectual Property

Intellectual property (IP) refers to property rights in creations of the mind, such as inventions, industrial designs, literary and artistic works, symbols, and names and images. The notion "intellectual property" is defined in the Convention Establishing the World Intellectual Property Organization (WIPO), 1967[14] to include rights relating to:

- literary, artistic and scientific works;
- performances of performing artists, sound recordings, and broadcasts;
- inventions in all fields of human endeavor;
- scientific discoveries;
- industrial designs;
- trademarks, service marks, and commercial names and designations;
- protection against unfair competition; and,
- all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

IP is generally divided into two main categories:

- The protection of **industrial property** has as its object patents, utility models, industrial designs, trademarks, service marks, trade names, geographical indications (indications of source or appellations of origin), and the repression of unfair competition.[15]
- **Copyright** includes literary and artistic works, such as novels, poems and plays, films, musical works, drawings, paintings, photographs and sculptures, computer software, databases, and architectural designs. **Related rights** (also referred to as "neighboring rights") include the rights of performing artists in their performances, producers of sound recordings in their sound recordings, and those of broadcasters in their radio and television broadcasts.

Additionally, **plant varieties** are protectable under the IP-related system of plant breeders' rights.

As the definition in the WIPO Convention indicates, "intellectual property" is not confined to the specific examples of intellectual property just mentioned. The phrase at the end of the definition in the WIPO Convention ("all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields" (article 2(viii)) makes it clear that "intellectual property" is a broad concept and can include productions and matter not forming part of the existing categories of intellectual property, provided they result "from intellectual activity in the industrial, scientific, literary or artistic fields."

Sui Generis

Sui generis is a Latin phrase meaning "of its own kind". A *sui generis* system, for example, is a system specifically designed to address the needs and concerns of a particular issue. Calls for a "*sui generis* system" for TK protection are sometimes heard. This could mean a system entirely separate from and different from the current IP system. Some persons, however, also the use the term to refer to new IP, or IP-like, rights. There are already several examples of *sui generis* IP rights, such as plant breeders' rights (as reflected in the International Convention on the Protection of New Varieties of Plants, 1991 ("The UPOV Convention")) and the IP protection of integrated circuits (as reflected in the Treaty on Intellectual Property in Respect of Integrated Circuits, 1989 ("The Washington Treaty")). In the field of TK, the 1982 Model Provisions (see above) provide *sui generis* protection for expressions of folklore.

Traditional Knowledge

"Traditional knowledge" is one of several terms used to describe broadly the same subject matter. Other terms in usage include "indigenous cultural and intellectual property", "indigenous heritage" and "customary heritage rights".

WIPO currently uses the term "traditional knowledge" to refer to tradition-based literary, artistic or scientific works; performances; inventions; scientific discoveries; designs; marks, names and symbols; undisclosed information; and all other tradition-based innovations and creations resulting from intellectual activity in the industrial, scientific, literary or artistic fields. "Tradition-based" refers to knowledge systems, creations, innovations and cultural expressions which: have generally been transmitted from generation to generation; are generally regarded as pertaining to a particular people or its territory; and, are constantly evolving in response to a changing environment. Categories of traditional knowledge could include: agricultural knowledge; scientific knowledge; technical knowledge; ecological knowledge; medicinal knowledge, including related medicines and remedies; biodiversity-related knowledge; "expressions of folklore" in the form of music, dance, song, handicrafts, designs, stories and artwork; elements of languages, such as names, geographical indications and symbols; and, movable cultural properties. Excluded from this description of TK would be items not resulting from intellectual activity in the industrial, scientific, literary or artistic fields, such as human remains, languages in general, and other similar elements of "heritage" in the broad sense.

Given this highly diverse and dynamic nature of TK it may not be possible to develop a singular and exclusive definition of the term. However, a singular definition may not be necessary in order to delimit the scope of subject matter for which protection is sought. This approach has been taken in a number of international instruments in the field of IP. For example, article 2.1 of the Berne Convention for the Protection of Literary and Artistic Works ("the Berne Convention"), does not include an exclusive definition for the meaning of "literary and artistic works," but rather provides a non-exhaustive enumeration of subject matter in order to demarcate the categories of creations which are protected under the Convention.[16] Certain other international agreements in the field of IP do not define a singular term which describes the totality of protected subject matter.[17]

WIPO's description of the subject matter naturally reflects its IP focus. WIPO's activities are concerned with the possible protection of traditional knowledge that is "intellectual property" in the broad sense as described in the definition of "intellectual property". For purposes of the FFMs, WIPO also used the expressions "traditional knowledge, innovations and culture" and "traditional knowledge, innovations and practices," which, for WIPO, had the same meaning as the shorter "traditional knowledge".

"Traditional knowledge" is a working term only. WIPO acknowledges the right of indigenous groups, local communities and other TK holders to decide what constitutes their own knowledge, innovations, cultures and practices, and the ways in which they should be defined.

The Future Harvest Centres supported by the Consultative Group on International Agricultural Research (CGIAR) observed, in their comment on the Draft Report, that the Report "tends to limit the sphere of TK, as being self-contained and isolated."[18]

Referring to the diagram at the end of this chapter (Figure 2), the comment suggests that the diagram:

> *"should have another outmost sphere which is the changing environment: biophysical (e.g. in reaction to soil erosion, introduction of germplasm) and socio-economical-political (e.g. market conditions, war and civil unrest). Very few indigenous communities remain isolated. It is often within this gray area in which TK interfaces with modernity (voluntarily or forced by circumstances) and continuously innovates. In short, TK is generated and applied within and outside community boundaries. Most likely, the innovations outside the respective community boundaries are where IP issues are most relevant."*

The findings of the FFMs and other activities of WIPO lend support to these views, as did other comments on the Draft Report.

The description of "traditional knowledge" in the Draft Report stated that "traditional knowledge" is also characterized by being developed "in a non-systematic way." Following a comment of the Future Harvest Centres that this would depend upon how one defines "systematic" and that it is certainly arguable that indigenous and local communities have "systematically" developed and maintained TK to meet changing local conditions and, amongst other things, provide for food security, we have amended our working definition accordingly. As the Future Harvest Centres correctly note:

> *"There is an extensive scientific literature attesting to the systematic, if locally specific, nature of traditional biodiversity knowledge. It is precisely these systems of plant use, culture and knowledge that local communities seek to preserve through IP (formal or informal). To deny their systematic nature already places TK at a disadvantage in terms of developing and applying appropriate IP tools."*[19]

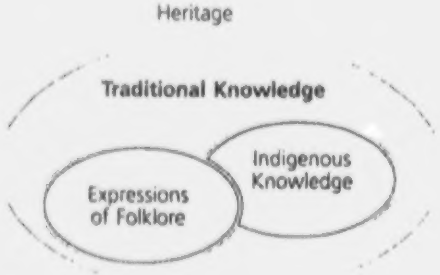
Certain other comments on the Draft Report also referred to the working definition of TK.[20]

Traditional Knowledge Holder

WIPO uses the term "traditional knowledge holder" to refer to all persons who create, originate, develop and practice traditional knowledge in a traditional setting and context. Indigenous communities, peoples and nations are traditional knowledge holders, but not all traditional knowledge holders are indigenous.

Conclusion: In summation, WIPO's focus is on **"traditional knowledge"** as described above. Traditional knowledge is created, originated, developed and practiced by **"traditional knowledge holders"**, the intended beneficiaries of WIPO's work in this field. From WIPO's perspective, **"expressions of folklore"** are a subset of and included within the notion "traditional knowledge". "Traditional knowledge" is, in turn, a subset of the broader concept of **"heritage"**. **"Indigenous knowledge"**, being the traditional knowledge of **"indigenous peoples"**, is also a subset of "traditional knowledge". As some "expressions of folklore" are created by indigenous persons, there is an overlap between "expressions of folklore" and "indigenous knowledge", both of which are forms of "traditional knowledge". See figure 2.

FIGURE 2



Notes

[1] Comment on the Draft Report by the Government of Canada, dated February 19, 2001.

[2] Comment on the Draft Report by Mr. Graham Dutfield, Researcher, Oxford Centre for the Environment, Ethics and Society, University of Oxford, dated December 12, 2000.

[3] Comment on the Draft Report by Mr. Bill Morrow, South Australia, Australia, dated December 15, 2000. Mr. Morrow attached to his comment the following two texts: B. Morrow, "Mabo and the Ownership of Dreams" (1993) Art Monthly Australian, p.7; and, B. Morrow, "Aspects of Intellectual Property and Textiles" in *Building on Batik – The Globalization of a Craft Community*, (Eds. M. Hitchcock and W. Nuryanti) (University of North London, Ashgate, 2000), p. 10.

[4] For example, comment on the Draft Report by the Government of Canada, dated February 19, 2001.

[5] Now the Sub-Commission on the Promotion and Protection of Human Rights.

[6] E/CN.4/Sub.2/1986/7 and Add. 1-4

[7] Comment on the Draft Report by INDECOPI, dated January 2, 2001.

[8] Comment on the Draft Report by Mr. C. Ray Brassieur, dated September 15, 2000.

[9] J. Mugabe, "Intellectual Property Protection and Traditional Knowledge", *Intellectual Property and Human Rights* (WIPO, 1999), p. 97 at pp. 98-99

[10] Collins English Dictionary, Fourth Edition, 1998.

[11] Concise Oxford Dictionnary, Sixth Edition, 1976.

[12] Comment on the Draft Report by Mr. Graham Dutfield, Researcher, Oxford Centre for the Environment, Ethics and Society, dated December 12, 2000.

[13] Comment on the Draft Report by Mr. Graham Dutfield, Researcher, Oxford Centre for the Environment, Ethics and Society, dated December 12, 2000.

[14] Article 2(viii).

[15] Article 1.2, Paris Convention for the Protection of Industrial Property, 1883.

[16] Article 2.1 stipulates that "[t]he expression 'literary and artistic works' *shall include* every production in the literary, scientific and artistic domain" (emphasis added). This inclusive characterization is illustrated by the words "such as" and a non-exhaustive enumeration of examples, which illustrate the categories of subject matter falling within the scope of protected subject matter. Over time new categories have been added to the non-exhaustive list (e.g., "choreographic and architectural works" were added in 1908 at the Berlin Revision Conference, "oral works" at the 1928 Rome Revision Conference, etc.).

[17] The Paris Convention for the Protection of Industrial Property (1883) ("the Paris Convention") does not provide an exclusive definition of the meaning of terms which describe the subject matter protected by industrial property rights, such as "invention," "industrial design," distinctive signs, etc. The TRIPS Agreement, finally, does not define the terms by which it describes the subject matter covered by the rights for which it establishes international standards.

[18] Comment on Draft Report of the Future Harvest Centres supported by the CGIAR, dated November 3, 2000.

[19] Comment on Draft Report of the Future Harvest Centres supported by the CGIAR, dated November 3, 2000. See also the Comment on the Draft Report by the Indigenous Peoples' Secretariat, Denmark, dated January 15, 2001.

[20] See, for example, the comment on the Draft Report by Dr. V.K. Joshi, Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University, Varanasi, India, dated December 11, 2000.

Part I

Framing the Intellectual Property Needs and Expectations of Traditional Knowledge Holders

We live in a 'global village', it is often said, in which increasing complexity makes each actor interdependent with all others. In today's global markets, small farmers in Peru may be affected by import regulations on the other side of the globe. Similarly, TK holders are affected by an increasing number of factors, especially when it comes to their IP needs and expectations. This chapter elaborates some of the factors, processes and conditions which shape their IP needs and expectations.

Some FFM informants indicated that TK holders are situated between their own customary regimes and the formal IP system administered by governments and inter-governmental organizations such as WIPO. It is also suggested that TK holders are situated within their own system, but increasingly have contact and interactions with the formal IP system.[*] Either way, their IP needs and expectations are shaped by the contact and interactions between these systems. At the same time, the formal IP system is continuously evolving and its evolution may affect TK holders in such areas as IP protection in the digital environment, protection for biotechnological inventions, expressions of folklore and non-original databases. The IP needs of TK holders receive their complexity, diversity and relevance from the multiple intersections of these factors and processes.

In this chapter, these factors are presented in three sections:

- the first section provides a brief description of the main contours of the formal IP system, including ongoing IP developments, particularly those which are relevant to TK holders and relate to their IP needs and rights;
- the second section provides a synoptic survey of non-IP multilateral institutions and initiatives relevant to the protection of TK; and,
- the final section recognizes that customary laws and protocols shape the IP needs and expectations of TK holders, and provides a few concrete examples of such laws and protocols from some of the FFMs.

---

[*] Comment on Draft Report by the Future Harvest Centres supported by the CGIAR, dated November 3, 2000.

Introduction to Intellectual Property

What is Intellectual Property?: Intellectual property (IP) refers to property rights in creations of the mind, such as inventions, industrial designs, literary and artistic works, symbols, and names and images. The notion "intellectual property" is defined in the Convention Establishing the World Intellectual Property Organization, 1967[1] to include rights relating to:

- literary, artistic and scientific works;
- performances of performing artists, sound recordings, and broadcasts;
- inventions in all fields of human endeavor;
- scientific discoveries;
- industrial designs;
- trademarks, service marks, and commercial names and designations;
- protection against unfair competition; and,
- all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

IP is generally divided into two main categories:

- The protection of **industrial property** has as its object patents, utility models, industrial designs, trademarks, service marks, trade names, geographical indications (indications of source or appellations of origin), and the repression of unfair competition.[2]
- **Copyright** includes literary and artistic works, such as novels, poems and plays, films, musical works, and drawings, paintings, photographs and sculptures, computer software, databases, and architectural designs. **Related rights** (also referred to as "neighboring rights") include the rights of performing artists in their performances, producers of sound recordings in their sound recordings, and those of broadcasters in their radio and television broadcasts.

Additionally, **plant varieties** are protectable in many countries under the IP-related system of plant breeders' rights.

As the definition in the WIPO Convention indicates, however, "intellectual property" is not confined to the specific examples of intellectual property just mentioned. The phrase at the end of the definition in the WIPO Convention ("all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields") makes it clear that "intellectual property" is a broad concept and can include productions and matter not forming part of the existing categories of intellectual property, provided they result "from intellectual activity in the industrial, scientific, literary or artistic fields."

Intellectual property rights (IPRs) are much like any other property rights – they allow the owner, or creator, of a patent, trademark, or copyright work to benefit from his or her innovation and creativity. These rights are outlined in Article 27 of the Universal Declaration of Human Rights, which includes, as a human right, the right to benefit from the protection of the moral and material interests resulting from authorship of any scientific, literary, or artistic production.

Objectives of IP Protection: The primary purpose of most branches of the IP system (excluding trademarks and geographical indications) is to promote and protect human intellectual creativity and innovation. IP law and policy does so by striking a careful balance between the rights and interests of innovators and creators, on the one hand, and of the public at large, on the other. Thus, by granting exclusive rights in an invention, for example, the IP system encourages further innovation, rewards creative effort, and protects the (often substantial) investment necessary to make and commercialize the invention. The patent system also encourages people to disclose inventions, rather than retain them as trade secrets, thus enriching the store of publicly-available knowledge and promoting further innovation by other inventors. Thus, public dissemination of information is an important IP objective. Copyright and other IP branches work in a similar way. The progress and well-being of humanity rests on its capacity for new creations in areas of technology and culture. The promotion and protection of IP can also spur economic growth, create new jobs and industries, and enhance the quality and enjoyment of life. However, the IP system also responds to the needs of the public at large. Most IP rights are of limited duration, after which the creations falls into the public domain (only trademarks may be renewed indefinitely, and geographical indications can subsist indefinitely).

The protection of trademarks and geographical indications is aimed at the protection of the goodwill and reputation of tradespersons and their products and to prevent the unauthorized use of such signs which is likely to mislead consumers.

The Nature and Scope of Intellectual Property Rights: Intellectual property rights comprise generally exclusive rights to prevent or authorize the reproduction, adaptation, use, sale, importation and other forms of exploitation of the creation or innovation that is the subject of the rights. In some cases, an intellectual property right may not be an exclusive right, but may rather comprise the right to claim a reasonable remuneration upon the exercise by a third party of any of the acts referred to. A more precise and detailed exposition of the rights granted under each branch of the IP system is contained in the sections on each branch below.

Limitations and Exceptions: All IP rights are subject to various exceptions and limitations, and in some cases compulsory (non-voluntary) licenses, tools which can be used to balance the rights of creators and users. For the purpose of achieving the public policy goals of IP, the possibility of imposing limitations on IPRs can be an important tool in the hands of lawmakers.

Constant Evolution: Another feature of the IP system is that it is in constant evolution. New advances in technology – information technology and biotechnology particularly – and changes in economic, social and cultural conditions, require continuous appraisal of the system and at times adjustment and expansion, accompanied often by controversy. For example, the last few decades have seen the recognition of new forms of IP, such as a *sui generis* form of protection for plant varieties (in the 1950s and 1960s), patent protection for biological material, plants and animals (in the 1970s and 1980s), a *sui generis* form of protection for layout designs (topographies) of integrated circuits (1980s), copyright protection for computer software (1980s) and protection for databases and compilations of data (1980s and 1990s). The possible protection of tradition-based innovations and creations by the IP system, the subject of this Report, is a more recently articulated question.

International Protection of IP: The IP rights granted in a country apply only in the territory of that country (this is the principle of "territoriality"). Consequently, copyright is effective only in the country where the copyright work was created, the country of which the author is a national or the country in which the work was first published. A patent, a mark or an industrial design is only effective in the country in which they were registered. IPRs are thus territorial in scope and not effective in other countries. Therefore, if the owner of, for example, a patent desires protection in several countries, a patent must be obtained in each of them separately. In order to guarantee the possibility of obtaining protection in foreign states for their own nationals, many states have concluded international IP agreements. International agreements also establish standards and common understandings at the international level. International treaties are interpreted and applied at the national level through national legislation and the courts. The first such agreement, the Paris Convention for the Protection of Industrial Property (the Paris Convention) was concluded as far back as 1883.[3]

The Agreement on Trade-Related Aspects of Intellectual Property Rights (the TRIPS Agreement) was concluded in 1994 as part of the Marrakesh Agreement Establishing the World Trade Organization (the WTO). The TRIPS Agreement came into force on January 1, 1995. For more information of the TRIPS Agreement, see text box "The TRIPS Agreement".

International agreements on IP typically include substantive obligations and also regulate relations between parties in accordance with one of two principles: **national treatment** and **reciprocity.** Under the principle of **national treatment**, a foreign national is afforded the same level of protection as a national of that country. Thus, a national of country X would receive the same benefits in country Y as if he or she were a national of country Y. Under the principal of **reciprocity**, a foreign national is given the same rights in a country as the rights that a national of that country has in that foreign country. Thus, a national of country X would receive the same benefits in country Y that a national of country Y would receive in country X. International IP treaties generally operate on the national treatment principle. The TRIPS Agreement adds another principle, the **most-favoured nation treatment** principle. According to this principle, any advantage, favour, privilege or immunity granted by a Member of the WTO to the national of any other country must immediately and unconditionally be accorded to the nationals of all other Members.[4]

THE TRIPS AGREEMENT

The TRIPS Agreement contains provisions on standards concerning the availability, scope and use of IPRs, the enforcement of IPRs, the acquisition and maintenance of IPRs and related procedures, dispute prevention and settlement, and transitional and institutional arrangements. While developed Members of the WTO had to comply fully with the Agreement by January 1, 1996, developing countries and countries in transition to a market-oriented economy had to comply by January 1, 2000. Least-Developed Country Members have until January 1, 2006 to be in full compliance. Some TRIPS obligations were subject to shorter transition periods, such as the implementation of the national treatment and the most-favoured nation treatment principles (one year for all Members, irrespective of their stage of development). Some other obligations were not covered by any transition period (such as the mail-box and the exclusive marketing rights system).

The Agreement is subject to three overlapping review processes that were due to commence in 1999 and 2000: a built-in review of Article 27.3(b) due to take place in 1999; an overall review of the Agreement in 2000 under Article 71.1; and, a next round of multilateral trade negotiations.

Following this introduction, the remainder of this section will provide a brief examination of the various broad categories of IP and certain associated subjects. Where relevant, reference will be made to current and emerging issues and any apposite international agreements. The following categories of IP and subjects will be referred to below:

- Copyright and Related Rights
- Patents
- Trademarks
- Geographical Indications

- Unfair Competition, including Trade Secrets
- Industrial Designs
- Plant Varieties
- Protection of "Expressions of Folklore"
- Assignment, Licensing and Technology Transfer
- Collective Management; and,
- Enforcement

Copyright and Related Rights

Copyright vests in, amongst others, the following, provided they are original:

- literary works (such as novels, poems, plays, reference works, and newspapers)
- artistic works (such as paintings, drawings, photographs, and sculpture)
- architectural works
- musical works
- maps and technical drawings
- audiovisual works
- databases; and
- computer programs.

Copyright normally vests, at least in the first instance, in the work's "author". The copyright owner has the exclusive rights to prevent the unauthorized reproduction, performance, broadcasting, translation and adaptation of the work. These are sometimes referred to as "economic rights". Copyright protection generally subsists for 50 years following the author's death, although some countries have recently extended this term to 70 years. While a work's author is, by operation of law, normally the owner of the copyright, national law may provide that when a work is created by an employee in the course and scope of his or her employment, then the employer, and not the employee, is the owner of the copyright. National laws may also provide for an author's "moral rights". These are the rights to claim authorship of the work and to object to any distortion, mutilation or other modification of, or other derogatory action in relation to, the work which would be prejudicial to the author's honor or reputation. Moral rights cannot be transferred from the author to another person or entity. Hence, even if the economic rights are assigned or licensed, the author always retains the moral rights. For example, if the economic rights to a play are sold to a theater company, the author still has the right to have his or her name featured in the playbill, even if the author does not receive any of the proceeds of the production (for information on licensing, see further under "Assignment, Licensing and Technology Transfer" below).

Copyright protection arises automatically upon the creation of the work, provided it meets the requirements for copyright. There is no need to apply for or register copyright. The requirements for copyright are generally that the work must be original, and, in some countries, expressed in some material form. The latter requirement facilitates part of the existence of copyright and alleged infringement. Copyright protection is not dependent on the literary, artistic or musical quality of the work. Copyright law protects the owner of the rights against those who use the form in which the original work was expressed by the author, or a substantial part of that form.

The exclusive rights of copyright are tempered by certain exceptions, limitations and compulsory licenses, such as "fair use" provisions. In general, a copyright work may be copied for the personal and private use of the person who makes the reproduction. Another example is the making of quotations from a protected work, provided the source of the quotation, including the name of the author, is mentioned and the extent of the quotation is compatible with fair practice.

So-called "related rights" or "neighboring rights" protect performing artists in their performances, producers of sound recordings, and those of broadcasters in their radio and television broadcasts.

Main International Agreements in Copyright and Related Rights

- The Berne Convention for the Protection of Literary and Artistic Works, 1971;
- The International Convention for the Protection of Performers, the Producers of Phonograms and Broadcasting Organizations, 1961 (the "Rome Convention");
- Convention for the Protection of Producers of Phonograms Against Unauthorized Duplication of their Phonograms, 1971 (the "Phonograms Convention");
- The Convention Relating to the Distribution of Programme-Carrying Signals Transmitted by Satellite, 1974 (the "Satellites Convention").

CURRENT AND EMERGING COPYRIGHT ISSUES

Issues currently under discussion within the copyright and related rights fields include the proposed protection of non-original databases, the protection of audiovisual performances, the enhancement of the rights of broadcasting organizations, and service provider liability for online copyright infringement. In addition, many questions relating to the exercise, management and enforcement of copyright on the Internet remain under discussion.

These are all WIPO-administered treaties. In addition, two new treaties were concluded in December 1996, the so-called "Internet treaties". They are not yet in force. They are the WIPO Copyright Treaty, 1996 (the WCT) and the WIPO Performances and Phonograms Treaty, 1996 (the WPPT). The WCT (in the field of copyright) and the WPPT(in respect of sound recordings and performances) clarify existing norms and offer new norms in response to the questions raised by digital technology, and particularly the Internet, referred to jointly as the "digital agenda." The treaties respond directly to the "digital agenda" in their provisions dealing with (1) the application of the reproduction right to the storage of works in digital systems, (2) the limitations and exceptions applicable in the digital environment, (3) technological measures of protection and (4) rights management information. Each treaty will come into force upon being ratified by 30 countries. As at February 1, 2001, 22 countries had ratified the WCT and 20 the WPPT.

The TRIPS Agreement includes provisions on copyright and related rights.[5]

Patents

A patent is an exclusive right granted for an invention, being a product or process that offers a new technical solution to a problem. To be protected by a patent, an invention must:

- be novel, that is, the invention must show some new characteristic which is not known in the body of existing knowledge. This body of existing knowledge is called the "prior art";
- show an inventive step (non-obviousness), which could not have been deduced by a person with average knowledge of the relevant technical field; and,
- be capable of industrial application (usefulness).

In addition, an invention must be accepted as "patentable" under law. In many countries, scientific theories, discoveries of materials or substances already existing in nature, and methods for the medical treatment of human and animals (as opposed to medical products and devices) are either not regarded as "inventions" or are considered inventions but are excluded from patent protection. In addition, certain fields of technology may not qualify for patent protection.

In some national laws, prior disclosure by the patent applicant or a third party within a certain period before the filing of the patent application can be excused with the result that such disclosure does not destroy novelty. This is known as a "grace period".

A patent provides the owner with the exclusive right to prevent others from using the patented invention without his or her authorization. The protection is granted for a limited period, generally 20 years from the filing date. After that time, the knowledge becomes part of the public domain for all to use. Patent protection means that the invention cannot be commercially made, used, distributed, offered for sale, imported or sold without the patent owner's consent. These patent rights are usually enforced in court, which, in most systems, has the authority to stop patent infringements. Moreover, a court, or in some countries an administrative agency, can also declare a patent invalid upon the successful challenge of a third party.

Patent applications: The first step in seeking patent protection is the filing of a patent application. The patent application generally contains a request, one or more claims, a description, drawings (if necessary) and an abstract. The request contains information such as the title of the invention and the name and address of the applicant. The description discloses the invention, and generally contains background information on the invention and an explanation of the invention, in clear language and enough detail that an individual with an average understanding of the field could use or reproduce the invention. Such descriptions are usually accompanied by visual materials such as drawings, plans, or diagrams, to better describe the invention. The application also contains various "claims", that is, a concise definition of the extent of protection being sought.

The examination of a patent application by a patent office includes an examination as to form (a formalities check), and may include (see below) a search and an examination as to substance. The objective of the search is to determine the prior art in the specific field to which the invention relates. In conducting the search, the patent office checks its documentation holdings that are arranged for search proposes according to specific areas of technology. The search may also include articles from technical and other journals. The search does not usually extend to disclosures other than publications, and in particular does often not include an examination of whether disclosure has taken place by public use. In some cases, an examiner may be personally aware of cases of prior use, or examiners may become aware of prior use through the intervention of a third party. While completeness is the ideal of the search, practical and economic considerations limit the scope of what is searched. However, the scope of the materials and information searched has given rise to controversy, particularly following cases in which patents have been granted in respect of products, processes or uses commonly known amongst indigenous, local and other communities. After the search, the substance of the application is examined in relation to the requirements for patentability, most notably novelty and inventive step.

It should be noted that national patent offices follow different approaches to patent application examinations. Some offices grant patents directly after the formalities check, that is to say, if the formalities are complied with, a patent is granted. In other countries, the offices conduct a search, and without making a decision on novelty or inventive step, a patent is granted. In other countries, a patent is granted only when the application complies with all the formal and substantive requirements.

In either case, the decisions of a national patent office are challengeable by the applicant or by third parties.

The information contained in a patent application is, in most cases, later published by the patent office, thus making the information publicly available. Patent information is a valuable source of technical information for third parties. Thus, the patent holder enjoys exclusivity in exchange for making publicly available information relating to his or her invention. However, it is only after the 20 year period of exclusivity that third parties can commercially exploit the invention without authorization by the owner (unless, under exceptional circumstances, a non-voluntary license has been granted).

A patent is a document issued by a national patent office or a regional office that does the work for a number of countries, such as the European Patent Office (EPO), the African Regional Industrial Property Organization (ARIPO), the African Intellectual Property Organization (OAPI) and the Eurasian Patent Organization (EAPO). Broadly speaking, under such regional systems, an applicant can request protection for an invention in more than one country. For example, a European patent granted by the EPO has the same effect as a national patent granted by the designated countries of the European Patent Convention subject to the fulfillment of certain requirements (such as, the filing of a translation in an official language of that country), and each country decides as to whether to offer patent protection within its borders. In the case of OAPI, a patent granted by OAPI has effect in all OAPI countries. Patents issued by ARIPO are only valid in designated countries and provided they are compatible with national laws. The WIPO-administered Patent Cooperation Treaty (PCT) provides for the filing of a single international patent application – see text box on "The Patent Cooperation Treaty" below.

Utility models: In some countries, protection may be obtained for "utility models", a name given to inventions mainly in the mechanical field. Generally, there is either only the criterion of novelty to be fulfilled or the inventive step required to obtain protection is smaller than that required for a patent, and the term of protection for utility patents is shorter.

THE PATENT COOPERATION TREATY (THE PCT)

The WIPO-administered Patent Cooperation Treaty (PCT) provides for the filing of a single international patent application which has the same effect as national applications filed in the designated countries. An applicant seeking protection may file one international application and request protection in as many signatory countries as needed. As at February 7, 2001, 110 countries were signatories to the PCT.

Patents on plant varieties: In a few countries, notably the United States of America, it is possible to "patent" a plant variety. Most countries, however, which protect plant varieties grant a special title of protection called, for instance, a "plant breeders' right" or "plant variety protection certificate". Some, such as the United States, grant a title that is called "patent" or "variety patent", which should not be confused with a patent for inventions. The International Convention on the Protection of New Varieties of Plants, administered by the Union for the Protection of Plant Varieties (UPOV), 1991, establishes international standards for plant variety protection by plant breeders' rights (see below).

Main International Agreements on Patents

- The Paris Convention;
- The Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure, 1980; and,
- The Patent Cooperation Treaty (the PCT), 1970.

The TRIPS Agreement includes provisions on patents.[6]

CURRENT AND EMERGING PATENT ISSUES

Patent Law Treaty: National and regional patent procedures differ from country to country and region to region, and sometimes require complex formalities, causing problems for patent applicants and owners. In this respect, in 1995 WIPO Member States decided to embark on the negotiation of the Patent Law Treaty (PLT) to simplify and harmonize patent procedures and formalities. The PLT was adopted at a Diplomatic Conference which took place from May 11 to June 2, 2000. Further work following the conclusion of the PLT, may include consideration by the Standing Committee on the Law of Patents (SCP), established under the auspices of WIPO, of the desirability and feasibility of further harmonization of patent law.

Trademarks

Trademarks are signs or combinations of signs used to identify the origin or source of a good or service. Trademarks come in a variety of shapes (two and three dimensional) and forms. A trademark may be a simple word or phrase, a company's name, a number, letters, (combinations of) colors, or an image. In some jurisdictions, sounds and smells are afforded protection as trademarks.

Although in some countries and in some situations a mark may be protected without registration, it is generally necessary for effective protection that a mark be registered in a government office (usually the same office as that which grants patents). Registration is made in respect of specified classes of goods or services. No person or enterprise other than its owner may use a registered mark for goods or services identical with or similar to those for which the mark is registered where such use may lead to confusion in the minds of the public. Well-known marks are provided protection in the same way without registration, or, in certain cases, may enjoy more far-reaching protection against unauthorized use for dissimilar goods or services.

The protection of a mark is generally not limited in time, provided its registration is periodically renewed (typically, every 10 years) and its use continues.

With the movement towards service industries, protection has been extended to **service marks**. As opposed to distinguishing between manufacturers of similar goods, service marks distinguish between providers of similar services. Otherwise, service marks and trademarks are virtually identical with respect to registration, use, and ownership rights.

Certification marks are trademarks used to identify a product which meets certain standards established, managed and enforced by an organization "competent to certify" the products concerned. The organization applies for the registration of the mark and, if successful, becomes the trademark owner. The WOOLMARK® mark is one of the best known examples of a certification mark. Only manufacturers who offer for sale products made in accordance with the standards established by the relevant organization are licensed by the organization to use the mark. Consumers thus benefit from knowing that the products concerned meet the required standards.

Collective marks are signs which serve not to distinguish the goods or services of one enterprise from those of others, but to distinguish the origin or other common characteristics of goods or services of different enterprises which use the collective mark under the control of the owner. Collective marks are usually owned by associations of enterprises which offer the goods or services offered under the mark. The regulations governing the use of the collective mark have to be included in the application for registration of the mark. In general terms, the difference between collective marks and certification marks is that the latter may only be used by members of the organization, while certification marks may be used by anyone who complies with the relevant standards. Thus, the use of a collective mark may not in and of itself be considered as a guarantee of quality, but merely an indication of association.

Main International Agreements on Trademarks

- The Paris Convention;
- Madrid Agreement Concerning the International Registration of Marks, 1891 and the Protocol Relating to that Agreement, 1989; and,
- The Trademark Law Treaty, 1994.

The TRIPS Agreement includes provisions on trademarks.[7]

CURRENT AND EMERGING TRADEMARK ISSUES

In September 1999, the Assembly of the Paris Union for the Protection of Industrial Property and the General Assembly of WIPO adopted a joint **Recommendation Concerning Provisions on the Protection of Well-Known Marks,** which aims at clarifying and consolidating the international protection of well-known marks.

Other issues currently under discussion include the question of how trademarks and other rights in distinctive signs can be protected on the Internet without unduly limiting the further development of electronic commerce, and the protection of "new trademarks" such as sound marks, smell marks and three-dimensional marks.

Geographical Indications

The term "**geographical indications**" is defined in Article 22.1 of the TRIPS Agreement[8] as an indication which identifies a good as originating in the territory of a Member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin. In this sense, "geographical indication" encompasses the term "**appellation of origin**" as defined by the Lisbon Agreement for the Protection of Appellations of Origin and their International Registration, 1979 and as referred to in the Paris Convention. Another subject of IP protection is an "**indication of source**", which is also referred to in the Paris Convention, and which refers to any expression or sign used to indicate that a product or service originates in a country, region, or specific place. The difference, it follows, between "geographical indication" as used in the TRIPS Agreement and "appellation of origin" as used in the Paris Convention, on the one hand, and "indication of source", is that the former require a quality link between the product and its area of production, the latter not.

Unfortunately, this topic is subject to some terminological confusion. The term "geographical indication" is often used to refer to both appellations of origin and indications of source. In order to take into account all existing forms of protection, this Report will use the term "geographical indication" in its widest possible meaning.

Well-known examples of geographical indications include "Champagne", "Cognac", "Sheffield", "Tequila", "Roquefort" and "Darjeeling".

Main International Agreements on Geographical Indications

- The Paris Convention;
- The Madrid Agreement for the Repression of False and Deceptive Indications of Source on Goods, 1891;
- The Lisbon Agreement for the Protection of Appellations of Origin and their International Registration, 1979.

The TRIPS Agreement contains provisions relevant to geographical indications.[9]

Unfair Competition, including Trade Secrets

The repression of unfair competition is directed against acts or practices, in the course of trade or business, that are contrary to honest practices, including, in particular:

- acts which may cause confusion with the products or services, or the industrial or commercial activities, of an enterprise;
- false allegations which may discredit the products or services, or the industrial or commercial activities, of an enterprise;
- indications or allegations which may mislead the public, in particular as to the manufacturing process of a product or as to the quality, quantity or other characteristics of products or services;
- acts in respect of unlawful acquisition, disclosure or use of trade secrets;
- acts causing a dilution or other damage to the distinctive power of another's mark or taking undue advantage of the goodwill or reputation of another's enterprise.

Trade secrets can be an effective way of protecting IP (for example, the formula for Coca-Cola® has never been patented but guarded as trade secret and thus may never be made known to the public). Trade secrets work by allowing individuals or companies to prevent information lawfully within their control from being disclosed to, acquired by, or used by others without their consent in a manner contrary to honest commercial practices. It may be said that, by definition, trade secret protection contrasts with the public disclosure principle that generally underlies the patent system. However, in today's global marketplace, the competitiveness of companies can be dependent upon their ability to prevent the untimely and unauthorized disclosure of their strategies, business methods, techniques and discoveries.

CURRENT AND EMERGING ISSUES IN UNFAIR COMPETITION AND TRADE SECRETS

Commerce means competition. Where there is competition, acts of unfair competition are liable to occur. Electronic commerce is no exception. However, since electronic commerce easily and freely transcends national borders, it tends to involve several jurisdictions at the same time. This poses several challenges for the IP system, including in the field of unfair competition. For companies active in electronic commerce it creates problems if their marketing activities are subjected to a greater number of, often contradictory, regulations.

Main International Agreements on Unfair Competition and Trade Secrets

While the Paris Convention contains provisions on unfair competition in general,[10] the TRIPS Agreement refers explicitly to undisclosed information.[11]

The TRIPS Agreement provides that protectable undisclosed information is that which:

- has been kept secret, in the sense that it is not, as a body or in the precise configuration and assembly of its components, generally known among or readily accessible to persons within circles that normally deal with the kind of information in question;
- has commercial value because it is secret; and,
- has been subject to reasonable steps, under the circumstances, to keep it secret, by the person lawfully in control of the information.[12]

Industrial Designs

An industrial design is the ornamental aspect of a useful article. This ornamental aspect may be constituted by elements which are three-dimensional (the shape of the article) or two-dimensional (lines, designs, colors) but must not be dictated solely or essentially by technical or functional considerations. Industrial designs are applied to a wide variety of products of industry and handicrafts: from technical and medical instruments to watches, jewelry and other luxury items; from housewares and electrical appliances to vehicles and architectural structures; from textile designs to leisure goods. To be eligible for industrial property protection in a country, industrial designs must be original or novel and must be registered in a government office (usually the same office as that which grants patents and trademarks). However, certain countries provide also for the protection of unregistered industrial designs.

CURRENT AND EMERGING ISSUES ON INDUSTRIAL DESIGNS

What form of protection for your design? Industrial designs are usually protected under specific design laws, but protection may also be possible under copyright law or as three-dimensional trademarks. Current debates are concerned *inter alia* with the relationship between these three branches of the IP system in relation to designs.

Protection of an industrial design means that third parties not having the consent of the owner of the protected industrial design may not make, sell or import articles bearing or embodying a design which is a copy, or substantially a copy, of the protected design, when such acts are undertaken for commercial purposes. Protection is given for a limited period of time (generally, 10 to 15 years).

In some countries, some kinds of industrial designs are (also) protected as works of art (works of art being objects of copyright protection). In certain countries, there may be an overlap between industrial design and copyright protection. Under certain circumstances, a design can also be protected by unfair competition law.

Main International Agreements on Industrial Designs

- The Paris Convention;
- The Hague Agreement Concerning the International Registration of Industrial Designs, 1925. This Convention was most recently revised in 1999. See text box on "The Hague Agreement Concerning the International Deposit of Industrial Designs, 1925".

These are both WIPO administered treaties. In addition, the TRIPS Agreement also contains provisions on industrial designs.[13]

THE HAGUE AGREEMENT CONCERNING THE INTERNATIONAL REGISTRATION OF INDUSTRIAL DESIGNS, 1925

Generally, industrial design protection is limited to the country in which protection is granted. Under the Hague Agreement Concerning the International Registration of Industrial Designs, 1925, a WIPO-administered treaty, a procedure for an international registration is offered. An applicant can file a single international application either with WIPO or the national office of a country which is a party to the Treaty. The design will then be protected in as many member countries as the applicant wishes. This Convention was most recently revised in 1999. The aim of the revision was to increase the number of Contracting Parties, while at the same time retaining the present simplicity and economy of the Hague system, thereby making it even more attractive for actual and potential users.

Plant Breeders' Rights

Breeding new varieties of plants requires a substantial investment in terms of skill, labor, material resources, money and time. Thus, protection is afforded to new varieties by means of IPRs (which may be referred to as plant breeders' rights), both as an incentive to the development of agriculture, horticulture and forestry and to safeguard the interests of plant breeders. The opportunity to obtain certain exclusive rights in respect of his or her new variety provides the successful breeder with a better chance of recovering costs and accumulating the funds necessary for further investment. It also enables him to organize the productivity of and trade in seeds and propagating material (such as cuttings) in such a way that his or her variety is made available to farmers in an effective manner. In some cases (for example, cut flowers) the breeder can also contribute to the organization of the productivity and trade in the product sold to consumers.
In order to gain protection, a plant variety must be:

- new;
- distinct;
- uniform, and
- stable.

A "distinct" plant variety is sufficiently different from existing plant varieties such that there is no confusion in identifying members of the new variety as separate from members of the old variety. A plant variety is "uniform" when the plants that make it up are sufficiently similar. The uniformity criterion respects the biological, technical and economic features of the variety's mode of propagation. Uniformity is, for example, very high in clones (varieties that are vegetatively propagated), since all plants are genetically identical, and relative in seed-reproduced cross-pollinating varieties. A variety is "stable" if it remains unchanged through successive generations of reproduction or propagation.

International Agreements on Plant Varieties

The International Convention on the Protection of New Varieties of Plants, 1991, administered by the International Union for the Protection of Plant Varieties (UPOV), establishes international standards for plant variety protection by plant breeders' rights.

The TRIPS Agreement contains one reference to plant varieties in Article 27.3(b). The relevant portion states:

> *"...Members (of the WTO) shall provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof...".*

As mentioned above, Article 27.3(b) was subject to a review four years after the date of entry into force of the WTO Agreement, that is, in 1999. The review was commenced at the first meeting of the TRIPS Council in 1999, and is still ongoing.

Protection of "Expressions of Folklore"

In the early 1980's, model provisions for the protection of folklore at the national level were adopted under the auspices of WIPO and the United Nations Educational, Scientific and Cultural Organization (UNESCO). These model provisions are the "Model Provisions for National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions" (the "Model Provisions"). Several countries have enacted legislation based, at least in part, on the Model Provisions, generally as part of their copyright law. The following are the main elements of the Model Provisions:[14]

Expressions of folklore to be protected

The Model Provisions do not offer any definition of folklore. However, Section 2 provides that "expressions of folklore" are understood as productions consisting of characteristic elements of the traditional artistic heritage developed and maintained by a community in the country or by individuals reflecting the traditional artistic expectations of such a community. The Model Provisions use the words "expressions" and "productions" rather than "works" to underline the fact that the provisions are *sui generis*, rather than part of copyright. It is another matter that expressions of folklore may, and often do, have the same artistic forms as "works."

Only "artistic" heritage is covered by the Model Provisions. This means that, among other things, traditional beliefs, scientific views (e.g. traditional cosmogony) or merely practical traditions as such, separated from possible traditional artistic forms of their expression, do not fall within the scope of the proposed definition of "expressions of folklore." On the other hand, "artistic" heritage is understood in the widest sense of the term and covers any traditional heritage appealing to our aesthetic sense. Verbal expressions, musical expressions, expressions by action and tangible expressions may all consist of characteristic elements of the traditional artistic heritage and qualify as protected expressions of folklore.

The Model Provisions also offer an illustrative enumeration of the most typical kinds of expressions of folklore. They are subdivided into four groups according to the forms of the "expressions," namely expressions by words ("verbal"), expressions by musical sounds ("musical"), expressions "by action" (of the human body) and expressions incorporated in a material object ("tangible expressions"). The first three kinds of expressions need not be "reduced to material form," that is to say, the words need not be written down, the music need not exist in musical notation and the dance need not exist in choreographic notation. On the other hand, tangible expressions by definition are incorporated in a permanent material, such as stone, wood, textile, gold, etc. The Model Provisions also give examples of each of the four forms of expressions. They are, in the first case, "folk tales, folk poetry and riddles," in the second case, "folk songs and instrumental music," in the third case, "folk dances, plays and artistic forms of rituals," and in the fourth case, "drawings, paintings, carvings, sculptures, pottery, terra-cotta, mosaic, woodwork, metalware, jewelry, basket weaving, needlework, textiles, carpets, costumes; musical instruments; architectural forms."

Acts against which expressions of folklore should be protected

There are two main categories of acts against which, under the Model Provisions, expressions of folklore are protected; namely, "illicit exploitation" and "other prejudicial actions" (Section 1).

"Illicit exploitation" of an expression of folklore is understood in the Model Provisions, (Section 3) as any utilization made both with gainful intent and outside the traditional or customary context of folklore, without authorization by a competent authority or the community concerned. This means that a utilization - even with gainful intent - within the traditional or customary context should not be subject to authorization. On the other hand, a utilization, even by members of the community where the expression has been developed and maintained, requires authorization if it is made outside such a context and with gainful intent.

Section 1 of the Model Provisions specifies the acts of utilization which require authorization where the circumstances described above exist. It distinguishes between cases where copies of expressions are involved and cases where copies of expressions are not necessarily involved. In the first category of cases, the acts requiring authorization are publication, reproduction and distribution; in the second category of cases, the acts requiring authorization are public recitation, public performance, transmission by wireless means or by wire and "any other form of communication to the public."

Section 4 of the Model Provisions determines four special cases regarding the acts restricted under Section 3. In those cases, there is no need to obtain authorization, even if the use of an expression of folklore is made against payment and outside its traditional or customary context. The first of these cases is used for educational purposes. The second case is used "by way of illustration" in an original work, provided that such use is compatible with fair practice. The third case is where an expression of folklore is "borrowed" for creating an original work by an author. This important exception serves the purpose of allowing free development of individual creativity inspired by folklore. The Model Provisions do not want to hinder in any way the creation of original works based on expressions of folklore. The fourth case in which no authorization is required is that of "incidental utilization." In order to elucidate the meaning of "incidental utilization," paragraph 2 mentions (not in an exhaustive manner) the most typical cases considered as incidental utilizations: utilization in connection with reporting on current events and utilization where the expression of folklore is an object permanently located in a public place.

"Other prejudicial actions" detrimental to interests related to the use of expressions of folklore are identified by the Model Provisions, as four cases of offenses subject to penal sanctions (Section 6):

- Firstly, the Model Provisions provide for the protection of the "appellation of origin" of expressions of folklore. Section 5 requires that, in all printed publications, and in connection with any communication to the public, of any *identifiable* expression of folklore, its source be indicated in an appropriate manner by mentioning the community and/or geographic place from where the expression utilized has been derived. Reference to "the community and/or geographic place" takes into account that the same folkloric expressions may be found in more than one territory.[15] Under Section 6, non-compliance with the requirement of acknowledgment of the source is a punishable offense.
- Secondly, any unauthorized utilization of an expression of folklore where authorization is required constitutes an offense. It is understood that such an offense may also be committed by using expressions of folklore beyond the limits, or contrary to the conditions of an authorization obtained.
- Thirdly, misleading the public by creating the impression that what is involved is an expression of folklore derived from a given community when, in fact, such is not the case is also punishable. This is essentially a form of "passing off."
- Fourthly, it is an offense if, in the case of public uses, expressions of folklore are distorted in any direct or indirect manner "prejudicial to the cultural interests of the community concerned." The term "distorting" covers any act of distortion or mutilation or other derogatory action in relation to the expression of folklore.
- Authorization of utilizations of expressions of folklore

When the Model Provisions determine the *entity entitled to authorize the utilization* of expressions of folklore, they alternatively refer to "competent authority" and "community concerned," avoiding the term "owner." They do not deal with the question of the ownership of expressions of folklore since this may be regulated in different ways from one country to another.

The tasks of the competent authority (provided such an authority has been designated) are to grant authorizations for certain kinds of utilizations of expressions of folklore (Section 3), to receive applications for authorization of such utilizations, to decide on such applications and, where authorization is granted, to fix and collect a fee–if required by law–(Section 10, paragraphs (1) and (2)).

The Model Provisions offer the possibility of providing in the law that a supervisory authority shall establish tariffs payable for authorizations of utilizations or shall approve such tariffs (without indication in the Model Provisions as to who will, in such a case, propose the tariffs, although it was understood by the experts adopting the Model Provisions that the competent authority would propose the tariffs) (Section 10), and that the supervisory authority's decision may be appealed to a court (Section 11, paragraph (1)).

Where the community as such is entitled to permit or prevent utilizations of its expressions of folklore subject to authorization, the community would act in its capacity of owner of the expressions concerned and would be free to decide how to proceed. There would be no supervisory authority to control how the community exercises its relevant rights. However, the Committee of Governmental Experts that adopted the Provisions was of the opinion that, if it was not the community as such, but a designated representative body thereof, which was entitled by legislation to give the necessary authorization, such a body would qualify as a competent authority, subject to the relevant procedural rules laid down in the Model Provisions.

The Model Provisions (Section 10, paragraph (2)) allow, but do not make mandatory, collecting *fees for authorizations*. Presumably, where a fee is fixed, the authorization will be effective only when the fee is paid. Authorizations may be granted free of the obligation to pay a fee. Even in such cases, the system of authorization may be justified since it may prevent utilizations that would distort expressions of folklore.

The Model Provisions also determine the purpose for which the collected fees must be used. They offer a choice between promoting or safeguarding national folklore or promoting national culture, in general. Where there is no competent authority and the community concerned authorizes the use of its expressions of folklore and collects fees, it seems obvious that the purpose of the use of the collected fees should also be decided upon by the community.

Sanctions

The Model Provisions state that sanctions should be provided for each type of offense determined by the Provisions in accordance with the penal law of each country concerned.

Assignment, Licensing and Technology Transfer

One means for accomplishing economic development is the commercial transfer and acquisition of technology. The sale, purchase and transfer of exclusive IPRs takes place through legal relationships between the owner of the exclusive rights and the person or legal entity which acquires those rights. Those legal relationships are essentially contractual in nature, which means that the transferor of the technology consents to the transfer and the transferee consents to acquire the rights in question. There are two principal legal methods that can be used to bring about a commercial transfer and acquisition of technology:

- Assignment
- License

Assignment: The first legal method is the transfer by the owner of all his, her or its exclusive IPRs and the purchase of those rights by another person or legal entity. When all the exclusive rights are transferred, without any restriction in time or other condition, by the owner of the IPRs to another person or legal entity, it is said that an "assignment" of such rights has taken place. The concept of assignment has been recognized in the laws of many countries. It applies to exclusive rights in patents, utility models, industrial designs, trademarks, copyright and related rights. The legal act whereby the owner of the IPRs transfers the rights to another is evidenced in writing in the form of a legal document generally referred to as "instrument of assignment" or simply an "assignment". The transfer law is called the "assignor" and the other person or entity, the transferee, is called the "assignee." When an assignment takes place, the assignor no longer has any rights in respect of the IPRs concerned, except for the moral rights under copyright law. The assignee becomes the new owner of the rights and is entitled to exercise all the rights exclusively.

License: The second legal method is through a license, that is, the grant of a permission by the owner of the IPRs to another person or legal entity to perform one or more of the acts which are covered by the exclusive rights. Licenses are often limited to a certain geographical territory and a certain period of time. The concept of "license" is recognized in the laws of many countries, and it applies to all forms of intellectual property. The legal document evidencing the permission given by the owner of the IPRs is usually referred to as a "license contract" or, more simply, as a "license." The owner who gives the permission is referred to as the "licensor." The person or legal entity who or which receives that permission is referred to as the "licensee."

The license is usually granted subject to certain conditions which will be set out in the written document by which the license is granted to the licensee. One of the conditions will obviously be related to the payment by the licensee of money in return for the license that is granted. The money concerned can be paid in a variety of forms, such as a lump sum payment or monthly or less frequent payments. The monies to be paid are often linked to the amount of income or profit accruing to the licensee pursuant to his or her exploitation of the licensed IPRs. Such monies are often referred to as "royalties."

Apart from assignment and licensing, there are other methods for the transfer of technology, including **franchising** and **distributorship, know-how contracts, consultancy arrangements, turn-key projects** and **joint venture arrangements**.

Collective Management

As pointed out in the section on copyright and related rights above, the protection granted by these rights is based on the premise that the author or owner of a work has the exclusive right to exploit his or her work or to authorize others to do so. This right seeks to guarantee that the right owner not only prevents others from using the work but is able to ensure that where permission is granted, the work is exploited in a way that is consistent with the owner's intentions and interests.

To exercise the rights to the utmost, the owner would have to be in a position to control the reproduction, performance and broadcasting of the work. The difficulty in exercising these rights individually was recognized very early on in the establishment of the international system of copyright protection. An author, for example, would have to set up systems for authorizing or preventing the use of his works. This would include, *inter alia*, negotiating contracts with each potential user, taking decisions on the economic conditions of the exploitation, monitoring the nature of the use to ensure that it is consistent with the permission and collecting remuneration from users.

The notion of collective management of rights (or "collective administration of rights") arose out of the recognition of the impracticality and incapacity of owners of rights to exercise their rights individually with the ever-increasing numbers of users of their works.

The international collective management system enables owners of rights to authorize collective management organizations ("collecting societies") to manage their rights. The term "collective" is used here to signify the centralization of all the elements involved in the exercise of rights in one organization for a large number of individual rights owners. This way, the organization performs the same functions for all the individuals using the same resources and develops economies of scale. Generally, this takes the form of owners of rights assigning some or all of their rights to this organization. This does not affect the exclusive nature of the rights but only means it becomes an indirect, and, it can be argued, more effective way of managing the rights. The benefits of collective management are not only limited to the owner of rights. Advantages also accrue to the users who have easier access to the works and at less cost as collective management decreases the cost of negotiating with users, monitoring use and collecting fees.

The types of rights currently managed by collecting societies are diverse and include:

- performing rights in musical works (rights of public performance, broadcasting and communication to the public);
- mechanical rights (right to authorize sound recording), mainly in musical works; and,
- certain rights in audiovisual works, works of fine art, dramatic works and reprographic reproduction of literary and graphic works.

Given that different rights can derive from one work, an owner of rights can therefore belong to several societies, each managing different rights in the same work.

Collecting societies can be private or public organizations or *quasi* - governmental in nature. This depends on the legal, economic, socio-political, and cultural circumstances in each country. Although set up as entities within national territories, the societies operate in an elaborate international cooperation system. They do so by entering into agreements (usually reciprocal) with other societies controlling similar rights in other territories ("sister" societies) to ensure collection and distribution of the royalties of their members is done world-wide.

Collecting societies have four primary functions:

- **Acquisition of rights from members:** The society acquires the rights in a work from the copyright owner (or from a "sister society") by assignment.
- **Licensing:** The society licenses the works to people or corporations wishing to exploit them on the basis of agreed fees developed by the society.
- **Collection of fees:** Timely collection of fees due to the owner of rights from the users.
- **Distribution:** Timely and correct distribution of royalties due to the owners of rights. This function is dependent on an efficient monitoring of the uses made of works.

Integral to these functions is the need for each society to be in a position to manage these rights internationally and to take legal steps to enforce them in the law courts.

Enforcement

In order for an IP holder to ensure the proper and lawful protection of his or her rights, the law must have provisions which allow an IP holder to investigate and prosecute violators. In some cases, the enforcement mechanisms of a specific country's legislation, and their proper application, can make the difference between significant support for genuine innovation, or the permitting of piracy. As geographical distance becomes less and less important for world trade, countries with strong enforcement measures serve as havens for concerted and effective technical innovation. Innovators are encouraged to invest money and conduct research in these countries, knowing that their future IP rights will be protected. Conversely, regions with less strict enforcement measures are sometimes exploited by individuals to make illicit copies and circumvent the rights of others.

There are several general forms of enforcement measures an IP holder can appeal to in order to protect his or her rights.

- First, there are *conservatory* or *provisional measures*. These measures are designed to prevent infringing works from reaching the marketplace. If an IP holder has sufficient reason to believe that copies of the protected works are being illegally produced, he or she can request that an authorized judicial authority approve a request to search the suspected location of the infringing items, and seize them if present. These actions serve the dual purpose of preventing entry of infringing items into the marketplace, and also preserving the evidence of such infringement.
- Once the evidence of infringement has been obtained, an IP holder can file a *civil action* or a *criminal complaint* as allowed for in the national jurisdiction. In cases where infringement was done accidentally (e.g. mistakenly assuming a work was in the public domain when it was actually copyrighted), a civil applicant or plaintiff may result in, *inter alia,* the destruction of the infringing works, any items used to produce those works, and compensation for any lost profits. In cases where an individual repeatedly and/or willfully infringes works, a criminal complaint may be filed. Depending upon the severity of the violation, any prior similar violations, and other relevant factors, a court may choose to impose hefty fines, imprisonment, and other measures to sufficiently deter future violations. In both civil actions and criminal complaints, a court may choose to place an injunction against future copying upon the individual charged. The injunction serves as an added deterrent by specifically warning against future infringement, and threatening a fine for non-compliance.

- An alternative to formal civil and criminal complaints are *arbitration* and *mediation*. Sometimes, parties involved in a dispute may not feel that a public court is the proper forum for settling their differences. In cases such as these, arbitration and mediation provide an attractive option for allowing a third party to facilitate discussion in a more flexible format. In both systems, a neutral third party (from now on "neutral") will be called on to help resolve the dispute. In mediation, the neutral will serve as a facilitator. The neutral will encourage discussion and assist both parties to reach a common ground of understanding; however, under mediation, either party may choose to terminate the contact at any time, and the neutral's observations/decisions have no binding affect upon either party. In arbitration, a neutral is once again engaged to help resolve the dispute; however, each party agrees to abide by whatever decision the neutral concludes. Thus, arbitration may be more adversarial than mediation, but arbitration guarantees a resolution to the conflict. Depending on the nature of the dispute, arbitration and mediation can sometimes generate mutually satisfactory outcomes more efficiently and quickly than submitting the dispute to the courts.
- Finally, there are *border measures*. These allow for customs officers to stop and check for infringement among items being imported. Although an IP holder does not have to prove that the items being imported definitively infringe, the IP holder must provide *prima facie* evidence that the goods are infringing. Essentially, border measures serve a similar function as conservatory or provisional measures; goods suspected of infringement are prevented from entering the marketplace and are preserved as evidence. Depending on national legislation, the IP holder may have to provide security to compensate the owner of the goods in case it is determined that the items were not infringing.

National laws determine the precise application and nature of enforcement measures.

The TRIPS Agreement, in Part III (Articles 41 to 61), contains detailed provisions on the enforcement of IP rights.

Notes

[1] Article 2(viii).

[2] Article 1.2, Paris Convention for the Protection of Industrial Property, 1883.

[3] The Paris Convention has been updated and amended several times since then, most recently in 1967.

[4] Article 4, the TRIPS Agreement.

[5] Section 1, Articles 9 to 14.

[6] Section 5, Articles 27 to 34.

[7] Section 2, Articles 15 to 21.

[8] Part II, Section 3, the TRIPS Agreement.

[9] Part II, Section 3, Articles 22.to 24 of the TRIPS Agreement.

[10] Article 10*bis*

[11] Article 39.

[12] The TRIPS Agreement, Article 39.2 . See also Nuno Pires de Carvalho, "From the Shaman's Hut to the Patent Office: How Long and Winding is the Road?", (1999) 40 *Revista da ABPI*, pp. 3-28 and (1999) 41 *Revista da ABPI*, pp. 3-17. See also Article 39.3 of the TRIPS Agreement.

[13] Part II, Section 4, Article 25 of the TRIPS Agreement.

[14] For a fuller account of the origins and provisions of the Model Provisions, see M. Ficsor, "Attempts to Provide International Protection for Folklore by Intellectual Property Rights", paper presented at UNESCO-WIPO World Forum on the Protection of Folklore, held in Phuket, Thailand, April 8-10, 1997.

[15] S. Le Gall, "Preserving One's Narrative: Implications of Intellectual Property Protection of Folklore and the Steel Pan in Trinidad and Tobago". Master of Law Thesis, York University, Canada, 1994, p. 155.

Other Relevant Multilateral Institutions and Initiatives

Introduction

The need for the protection of TK can be described as a horizontal concern, as different multilateral institutions are involved in discussing it from different perspectives and in different contexts. This section does not set out to review those discussions in depth, but rather it highlights the progress made by other relevant institutions and in other multilateral initiatives in identifying TK and proposing mechanisms for its protection. The section also neither attempts to include information on all institutions and processes, nor describe all their work on TK. It rather limits itself to the institutions and processes which have a particular relevance for TK within an intellectual property (IP) context. The order of the institutions mentioned herein does not reflect any particular hierarchy as to the relevance of their work. WIPO considers all initiatives being undertaken in other fora that touch upon IP equally relevant and valuable.

The United Nations Environment Programme (UNEP)

UNEP is the overall co-ordinating environmental organisation of the United Nations system. Its mission is to provide leadership and encourage partnerships in caring for the environment by inspiring, informing and enabling nations and peoples to improve their quality of life without compromising that of future generations. In recent years, several multilateral environmental agreements relevant to TK have been concluded under the auspices of UNEP. These include:

The Convention on Biological Diversity

One of the areas of policy and legislation development in the Convention on Biological Diversity, 1992 (the CBD) regards the implementation of Article 8(j) and related provisions, which mandates Contracting Parties, as far as possible and as appropriate, subject to their national legislation, to "*respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices.*"

The third Conference of the Parties (COP) to the CBD decided that an intersessional process should be established under the CBD to advance the implementation of Article 8(j) and related provisions.[1] As part of this intersessional process a Workshop on Traditional Knowledge and Biological Diversity was organized in Madrid, Spain, in November 1997, which provided a Report to the COP on the possibility of developing a workplan on Article 8(j) and related provisions. Taking note of that Report, the fourth COP of the CBD, held in Bratislava, Slovakia, in April 1998, decided that an *Ad hoc* Open-ended Inter-sessional Working Group be established to address the implementation of Article 8(j), with the mandate, *inter alia,* to develop a programme of work for the implementation of Article 8(j) and related provisions and to provide advice on the development of legal and other appropriate forms of protection for subject matter covered by Article 8(j).[2] This Working Group held its first meeting in Sevilla, Spain, in March 2000, and developed a programme with the objective of a just implementation of Article 8(j) at local, national, regional and international levels and to ensure the full and effective participation of indigenous and local communities at all stages and levels of its implementation. The fifth COP, held in Nairobi, Kenya, in May 2000, in its Decision V/16 endorsed a Programme of Work On the Implementation of Article 8(j) and Related Provisions of the CBD.[3]

The scope of TK under the CBD may be said to be narrower than the concept on which WIPO has based its work.[4] Two elements of Article 8(j) contribute to that: the nature of the subject-matter, which is confined to knowledge associated with the conservation and sustainable use of biodiversity, and the identification of the right holders as indigenous and local communities embodying traditional lifestyles.

The language of Article 8(j) of the CBD suggests that its implementation requires three sorts of legislative action:

- definition of standards concerning the availability, scope and use of rights (which could include IP rights) in knowledge, innovations and practices of indigenous and local communities, as well as the establishment of measures concerning the enforcement of those rights;
- promotion of wide application of such knowledge, innovations and practices with the approval and involvement of the holders of such knowledge; and
- encouragement of the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices.[5]

The United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa

The United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, 1994 (the UNCCD) promotes a new approach to managing dryland ecosystems and development aid flows. The Convention is implemented through action programs, which address the underlying causes of desertification and drought and identify measures to prevent and reverse it. These action programs are based on a bottom-up approach and originate at the local level. The relevance of TK in this process is reflected in Articles 16, 17, 18 and 19 of the Convention.

The Food and Agriculture Organization of the United Nations (FAO)

The Commission on Genetic Resources for Food and Agriculture, of the Food and Agriculture Organization of the United Nations (FAO), is a permanent forum in which governments are, *inter alia*, renegotiating the International Undertaking on Plant Genetic Resources, 1983. In 1993, the FAO Conference adopted Resolution 7/93 for the adaptation of the International Undertaking in harmony with the CBD, including the issue of the realization of Farmers' Rights. The revision has proceeded in three stages: the first was the integration of the three interpretative annexes into the Undertaking, a legally non-binding document (the interpretative annexes addressed matters of compatibility with national laws of plant variety protection and with the CBD); the second stage was the consideration of access to plant genetic resources (including access to collections acquired outside the framework of the CBD) and the realization of farmers' rights. The third stage concerns legal and institutional options.[6]

At present, it appears that the negotiators of the Undertaking have agreed on a general approach to farmers' rights, according to which the Parties to the future agreement shall *"recognize the enormous contribution* *that farmers of all regions of the world, particularly those in the centres of origin and crop diversity, have made and will continue to make for the conservation and development of plant genetic resources which constitute the basis of food and agriculture production throughout the world. These contributions form the basis for F/farmers' R/rights as they relate to plant genetic resources for food and agriculture."*[7]

The revised text of the International Undertaking will provide for the protection of TK under a narrow approach. Indeed, the subject matter of farmers' rights is confined to plant genetic resources for food and agriculture. Animal genetic resources, for the time being, are outside of the Undertaking's scope. Plant genetic resources that are used in other economic activities, such as the chemical and the pharmaceutical industries, are also beyond the scope of the Undertaking. Furthermore, the holders of rights are limited to farmers.[8]

The United Nations Working Group on Indigenous Populations

The Working Group on Indigenous Populations (the WGIP) was established by the Economic and Social Council of the United Nations in 1982. The WGIP is a subsidiary organ of the Sub-Commission on the Promotion and Protection of Human Rights (formerly the Sub-Commission on the Prevention of Discrimination and Protection of Minorities).

Its five members are independent experts and are members of the Sub-Commission. Apart from facilitating and encouraging dialogue between Governments and indigenous peoples, the Working Group has two formal tasks:

- To review national developments pertaining to the promotion and protection of the human rights and fundamental freedoms of indigenous peoples; and
- To develop international standards concerning the rights of indigenous peoples, taking account of both the similarities and the differences in their situations and aspirations throughout the world.

In furtherance of the second task, the WGIP has developed *inter alia* the Draft United Nations Declaration on the Rights of Indigenous Peoples, adopted by the Sub-Commission on Prevention of Discrimination and Protection of Minorities, in 1994, Article 29 of the Draft Declaration states: *"Indigenous peoples are entitled to the recognition of the full ownership, control and protection of their cultural and Intellectual Property. They have the right to special measures to control, develop and protect their sciences, technologies and cultural manifestations, including human and other genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs and visual and performing arts."*

The WGIP has also developed Draft Principles and Guidelines for the Protection of the Heritage of Indigenous Peoples, and is engaged in several other indigenous peoples-related initiatives and issues touching upon the protection of the TK of indigenous peoples. Since the launch of the International Decade of the World's Indigenous People in 1995, numerous other United Nations human-rights bodies (such as the Human Rights Committee, the Committee on the Rights of the Child, the Committee on the Elimination of Racial Discrimination and the Committee on Economic, Social and Cultural Rights) have addressed indigenous peoples' concerns.

The United Nations Educational, Scientific and Cultural Organization (UNESCO)

UNESCO, in coordination with WIPO, has long been involved in the protection of one of the main components of TK: folklore. The international community has recognized the need to protect expressions of folklore since the 1970s. In 1982, a set of model provisions were developed under the UNESCO/WIPO auspices which could be incorporated into national legislation to help protect expressions of folklore, namely the UNESCO/WIPO Model Provisions for National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and other Prejudicial Actions, 1982. (See summary of the Model Provisions in the section "Introduction to IP".) In 1989, the UNESCO General Conference adopted a "Recommendation on the Safeguarding of Traditional Culture and Folklore". Given that an effective international regime for the protection of expressions of folklore has not been developed since the preparation of the model provisions, WIPO and UNESCO were asked at the UNESCO/WIPO World Forum on the Protection of Folklore held in Phuket, Thailand, in April 1997, to convene regional consultations on these issues. Four regional consultations were convened for developing countries as follows: for African countries in Pretoria, South Africa (March 1999); for countries of Asia and the Pacific region in Hanoi, Viet Nam (April 1999); for Arab countries in Tunis, Tunisia (May 1999); and for Latin America and the Caribbean in Quito, Ecuador (June 1999).[9]

UNESCO is also engaged in several other activities relating to the protection of cultural heritage and diversity. Certain UNESCO conventions and other instruments are particularly relevant. These include: the Convention on Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Diversity of Cultural Property, 1970; the Convention Concerning the Protection of the World Cultural and National Heritage, 1972; and, the Declaration on the Principles of International Cultural Cooperation, 1966.

The International Labour Office (ILO)

The ILO has analyzed the labour conditions of indigenous and tribal workers. In this context, the General Conference of the ILO, which meets annually to discuss social and labour questions, adopted, in 1989, the Convention Concerning Indigenous Peoples in Independent Countries (Convention No. 169). Convention No. 169 sets a general policy of respect for the human rights of indigenous and tribal peoples, asserts their rights to land, and provides for some rules as regards labour, social security and health-related matters. Convention No. 169 may have relevance for the protection of TK of indigenous peoples to the extent that it identifies the rights of those peoples to *"the full realisation of the social, economic and cultural rights [...] with respect for their social and cultural identity, their customs and traditions and their institutions."* (Article 2.2(b)).[10]

Inspired by Convention No. 169, the ILO launched the Interregional Program to Support Self-reliance of Indigenous Tribal Communities through Cooperatives and other Self-Help Organizations (INDISCO) and the strengthening of the capacities of indigenous and tribal peoples, helping them to design and implement their own development plans and initiatives and ensuring that their traditional values and culture are safeguarded.

The World Bank

The World Bank's Policy on Indigenous Peoples dates back to 1982. In 1991, the Bank issued a revised policy, which extended the definition of indigenous peoples to include a much wider array of peoples who maintain social and cultural identities distinct from those of the national societies where they live, have close attachments to their ancestral lands and are often susceptible to being disadvantaged in the development process. This policy is currently under revision. The World Bank has indicated that since its revised policy became effective in 1991, more than 150 Bank-financed projects worldwide have been identified, many of which have indigenous peoples development plans or strategies for ensuring that they receive culturally appropriate benefits. The Bank also undertakes a growing amount of research and sector work, which applies to indigenous peoples and other ethnic and minority groups.

The World Health Organization (WHO)

The focus of the WHO on health needs of indigenous peoples has increased since the beginning of the United Nations Decade of the World's Indigenous People in 1995. A number of departments and clusters have been involved in past and current activities of the organization related to the health of indigenous people, such as the Substance Abuse Department, the Non-communicable Diseases Cluster and the Traditional Medicine Team. During 1998, WHO co-sponsored and participated in the organization of the third "Healing our Spirit", in New Zealand which focused on indigenous peoples and substance misuse. At the 51st World Health Assembly, in May 1998, a resolution on the health of indigenous peoples was passed, requiring the Organization, as a contribution to the Decade, to increase its attention to the health needs of indigenous populations in a comprehensive and systematic way. WHO has established a partnership with the Committee on Indigenous Health, which was established by the indigenous caucus during the preparatory conference for the 15th session of the Working Group of Indigenous Populations. In partnership with the Committee, two forums on the health of indigenous peoples were organized during the 1998 and 1999 sessions of the Working Group of Indigenous Populations. In November 1999, WHO organized an international consultation on the health of indigenous peoples in Geneva.

The United Nations Conference on Trade and Development (UNCTAD)

UNCTAD launched the BIOTRADE Initiative at the third Conference of the Parties of the CBD, in November 1996, with the mission of stimulating trade and investment in biological resources to further sustainable development.[11] As a matter of course, the knowledge on how to use those resources is a fundamentally important component of trade in biological resources. Therefore, the BIOTRADE initiative may have a relevant role in promoting awareness as to the need for developing new mechanisms to protect biodiversity-associated TK. The BIOTRADE Initiative is currently being revised and will be re-launched soon.[12]

At the Tenth session of UNCTAD, held in Bangkok, on February 12-19, 2000, UNCTAD Member States approved an extensive Plan of Action, including specific work on the protection of TK. The relevant part of paragraph 147 of the Plan of Action reads: "*UNCTAD should also, in full cooperation with other relevant organizations, in particular and where appropriate WIPO and WHO, promote analysis and consensus building with a view to identifying issues that could yield potential benefits to developing countries, including the link between public health and development. This should focus on: [...] Taking into account the objectives and provisions of the Convention on Biological Diversity and the TRIPS Agreement, studying ways to protect traditional knowledge, innovations and practices of local and indigenous communities and enhance cooperation on research and development on technologies associated with the sustainable use of biological resources.*" It appears, therefore, that UNCTAD will be fully involved in assisting the Contracting Parties of the CBD in finding appropriate mechanisms to protect biodiversity-associated TK.

The World Trade Organization (WTO)

The WTO has also carried out relevant work in the field of TK. WTO Members, conscious of the influence of the TRIPS Agreement as a factor of improvement of IP protection, have asked various bodies of that organization, such as the Committee on Trade and Environment (CTE), the Council for TRIPS and the General Council, to address the issue.[13] In the lead to the Third Ministerial Conference of WTO Members in Seattle on November 30 to December 3, 1999, a number of WTO Members submitted proposals, both in the context of the review of Article 27.3(b) of the TRIPS Agreement and of an eventual new round of negotiations, that the TRIPS Agreement should contain provisions on the protection of TK. The rationale that underlies such a proposal seems to be straightforward: the same principle of non-discrimination in international trade that underlies the TRIPS Agreement should also apply in the context of TK. It is possible that WTO Members may at some point be engaged in negotiating the introduction of provisions aimed at protecting TK in the TRIPS Agreement.

The United Nations Development Program (UNDP)

Within the framework of the policy of sustainable human development adopted by the UNDP, issues related to indigenous people have gained considerable attention.

Supporting and strengthening indigenous communities and organizations is a task that cuts through UNDP's main thematic areas - poverty eradication, employment and sustainable livelihoods, gender equity, good governance and the sustainable management of the environment. Over the course of 1999, UNDP was taking stock of its work and its engagement with indigenous peoples and mapping out how best to move forward strategically over the next four years of the decade and beyond.

The Open-ended Ad Hoc Intergovernmental Panel on Forests

This panel was established as a subsidiary organ of the Commission on Sustainable Development (the CSD) by the Economic and Social Council to pursue consensus and formulate co-ordinated proposals for action to support the management, conservation and sustainable development of forests. Its Programme of work encourages countries to consider ways and means for the effective protection of traditional forest-related knowledge, innovations and practices of forest- dwellers.

Other international organizations involved in TK-related issues, include the **United Nations Population Fund (UNFPA),** the **World Food Program (WFP),** the **United Nations Children's Fund (UNICEF),** and the **International Fund for Agricultural Development (IFAD).**

Final remarks

Given that TK is a horizontal, cross-cutting issue, the approach adopted by the different organizations mentioned above takes a specific character, which is naturally a reflection of each organization's particular mandate and objectives. Differences in perspective have helped enrich the debate and, more importantly, have stressed the need for collaborative and cooperative approaches – respecting each institutions respective mandate and areas of expertise – to finding operative and efficient ways of protecting TK, by using existing IP mechanisms, or by developing a new, *sui generis* one, or by adopting a combination of both.

Notes

---

[1] See Decision III/14, paragraph 9.

[2] See Decision IV/9, paragraphs 1(a) and (b).

[3] See the Annex of Decision V/16.

[4] See WIPO's working definition of traditional knowledge in the chapter on "Terminology."

[5] See further "Intellectual Property and Genetic Resources", document prepared by the International Bureau of WIPO for the WIPO Meeting on Intellectual Property and Genetic Resources, held in Geneva on April 17 and 18, 2000 (document number WIPO/IP/GR/00/2)

[6] *Revision of the International Undertaking on Plant Genetic Resources – Consolidated Negotiating Text Resulting from the Deliberations during the Fifth Extraordinary Session of the Commission on Genetic Resources for Food and Agriculture*, CGRFA/IUND/CNT/Rev.1 (Article 12). An alternative provision is also under consideration: instead of saying that farmers' contributions "form the basis for F/farmers' R/rights", it says that those contributions "form the basis for the concept of F/farmers' R/rights." (emphasis added). Apparently, the difference between the two options lies on the fact that the reference to the concept of farmers' rights will give Parties total freedom to establish their own legal systems. In contrast, if those contributions form the basis for the rights, then the relevant language of the Undertaking should be seen as a basic framework with which national laws should conform

[7] *Revision of the International Undertaking on Plant Genetic Resources – Consolidated Negotiating Text Resulting from the Deliberations during the Fifth Extraordinary Session of the Commission on Genetic Resources for Food and Agriculture*, CGRFA/IUND/CNT/Rev.1 (Article 12). An alternative provision is also under consideration: instead of saying that farmers' contributions "form the basis for F/farmers' R/rights", it says that those contributions "form the basis for the concept of F/farmers' R/rights." (emphasis added). Apparently, the difference between the two options lies in the fact that the reference to the concept of farmers' rights will give Parties total freedom to establish their own legal systems. In contrast, if those contributions form the basis for the rights, then the relevant language of the Undertaking should be seen as a basic framework with which national laws should conform

[8] A footnote to Draft Article 12 clarifies that negotiating parties still need to agree on definitions of farmers' rights, farmers and farming communities (which may indicate that the most difficult aspects of farmers' rights are still to be negotiated). Another footnote informs that the European Region proposed that, for the purpose of the Undertaking, farmers and farming communities include indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of plant genetic resources for food and agriculture.

[9] The Recommendations produced by the four regional consultations are reproduced in Annex 5.

[10] *Indigenous and Tribal Peoples: A Guide to ILO Convention No. 169*, by Manuela Tomei and Lee Swepston, published by the ILO with the financial support of the International Centre for Human Rights and Democratic Development, in July 1996, provides a complete introduction to the text and the spirit of the Convention.

[11] Since the BIOTRADE Initiative cannot take place without taking into account the transfer of the knowledge associated with the biological resources being traded, it becomes relevant in the area of TK protection. Actually, once fully implemented, the BIOTRADE Initiative will constitute UNCTAD's essential contribution to the role of biodiversity in international trade. Indeed it can be asserted that "biodiversity, and the knowledge associated with using it in a sustainable manner, are a comparative advantage of those least developed countries that are biodiversity-rich, enabling them to participate more effectively in global markets and thus rise above current levels of poverty and deprivation." (see *Protection of Traditional Knowledge: A Global IP Issue*, document WIPO/RT/LDC/14 prepared by the International Bureau of WIPO for the High Level Interregional Roundtable on IP for the Least Developed Countries (LDCs), Geneva, September 30, 1999).

[12] Further information available at http://www.biotrade.org

[13] In the context of the activities of the CTE, the WTO Secretariat has prepared several documents reflecting how WTO Members' obligations concerning non-discrimination in international trade interact with the protection of traditional knowledge: *Environment and TRIPS* (WT/CTE/W/8 and W/8/Corr.1), *The Convention on Biological Diversity and the Agreement on Trade-Related Aspects of IP Rights* (WT/CTE/W/50), *The Relationship Between the Convention on Biological Diversity (CBD) and the Agreement on Trade-Related Aspects of IP Rights (TRIPS); with a Focus on Article 27.3(b)* (WT/CTE/W/125). The thrust of these documents is that the TRIPS Agreement does not impair the protection of traditional knowledge by IP regimes, or by non-IP regimes, such as contract law. These documents point out that several areas of IP protection (including patents and protection of undisclosed information) included in the TRIPS Agreement could be useful tools for the protection of environmentally-sound technologies. As far as technology that may cause serious prejudice to the environment is concerned, Article 27.2 of the TRIPS Agreement allows that WTO Members exclude it from patentability, provided some conditions are met. Document WT/CTE/W/125 comments on legislation implementing the CBD, including the Andean Community's Common System on Access to Genetic Resources and the Biodiversity Law of Costa Rica.

Customary Laws and Protocols

Introduction

TK holders often live in the "traditional" and the "modern" world at the same time. With respect to IP this means living by the rules of customary laws and modern IP systems at the same time. Several participants at the meetings conducted during the FFMs indicated that the IP needs of TK holders are shaped by their contact with the formal IP systems on the one hand and informal IP regimes that prevail in their societies and communities on the other. As one informant observed, *"[t]his is a cross-cultural problem"*.[1] Some IP organizations, such as the Australian Copyright Council, have presented the recognition of informal regimes and customary law as "a third approach" to addressing the IP needs of TK holders: *"What is now advocated by Indigenous communities is protection of traditional cultural expression by the application of customary intellectual property law on its own terms, as of right"*.[2] In recognition of the cross-cultural dimensions of intellectual property, numerous FFM participants distinguished between the formal IP system and informal IP regimes. They maintained that the IP needs, rights and expectations of TK holders are shaped by their contact with *both* these regimes.

One of the biggest problems that was expressed during the FFMs was the inaccessibility of the formal IP system for TK holders. This system is based on document-intensive, codified and governmentally administered structures and procedures. Most modern intellectual property debates therefore presuppose the existence of formal government and written records. FFM counterparts pointed out that these are conditions which many TK holders in indigenous and local communities cannot rely upon in practice, because indigenous and local communities often lack formal government and oral traditions lack written records.

BOX 1. CREATION AND PROTECTION OF TRADITIONAL SONGS AMONG FIRST NATIONS IN NORTH AMERICA

Counterparts in Canada pointed out that there was wide-ranging trade in traditional songs among First Nations which was governed by IP-like protocols. "For instance, somebody is fasting and sees a vision about a song that they are to sing ... They complement the song and define under what terms that song may be used, for example only in spiritual situations. Now, it is possible to acquire a song from another individual: songs can be traded just like any other material. If you have a song that I like, I can make an offer to you that I can trade a song for something else. You may give me the song and the right to sing that song. ... Only the person to whom the song has been passed on has the right to use it. Sometimes this could be a whole drummer group. But they don't have the right to hand it over to others. The recipient would first have to ask: do you give us the right to share this song with others?" While these protocols differed among the different nations, general codes of conduct were also observed in the trade of songs between nations. (Saskatoon, Canada, 12.11.98)

Some parties with whom the WIPO delegations met pointed out that the application of modern intellectual property systems to the specific needs of TK holders therefore requires a sensitivity to the cultures of TK holders as well as an awareness of the cultural and legal assumptions underlying the formal IP system. An understanding of the cultural differences and similarities between formal and informal IP regimes can begin with the following premise: at the origin of all intellectual property regimes lies the problem that information has economic value in certain circumstances. This is a problem common to all cultures and societies. Participants in the FFM meetings argued that different cultures have resolved this basic problem in different ways through systems of rights and obligations which regulate the dissemination and transmission of TK.

TK holders indicated that local and indigenous communities have evolved diverse but stable societal structures which regulate the flow of knowledge and innovations. They considered these informal regimes to be different from the formal IP-systems administered by WIPO, but just as effective in protecting the local innovator in his or her local context.

As one of the persons consulted on the FFMs put it:

> *"We have had songs, traditional knowledge and so on for hundreds of years. There was no doubt as to who originally owned them – they were originally owned by one person, who later passed them on to his or her clan. There were clear customary laws regarding the right to use the songs and the knowledge. There was no problem in the past. Why are there problems now? We should begin with communities, and see how they protected their cultural expressions and knowledge. Then we should use the same customary tools or tools adapted from them".*[3]

Using findings from three different FFMs, this section exemplifies three such informal regimes and protocols, each covering a different area of TK subject matter: (1) trade regimes over traditional designs, as identified in the North America FFM; (2) ritual regimes over traditional medicinal knowledge, as identified in the South Asia FFM; and, (3) customary law provisions over traditional images, symbols and artistic works, as identified in the South Pacific FFM.

Customary protocols for traditional designs, songs and dances (North America)

Participants at meetings of the FFM to North America highlighted that in the past trade and cultural relations between Aboriginal First Nations were governed by IP-like protocols which applied to traditional designs, songs and dances. Elders of First Nations stated that, *"We had laws that protected this knowledge"*.[4] While these customary laws varied from nation to nation, IP-related protocols were referenced by numerous First Nations in respect of songs, dances, designs and names (see Box 4). The local counterparts during the FFMs pointed out that they see such customary practices as linked to their collective cultural identity: *"As first nations, we have our own IPRs and that's mainly coming from who we are and what we believe"*.[5]

Elders of the Bloodtribe in Canada explained to the FFM a complex set of rules, rights and obligations governed the creation of certain traditional designs and the rights to their subsequent reproduction, adaptation and public display in the Bloodtribe nation. Customary regimes also governed the transfer, licensing and enforcement of these rights as well as the settlement of disputes arising from the infringement of such rights. The right holders could be individuals, families, "houses" or entire nations. The possible subject matter of exclusive rights could include a wide range of designs, including designs for traditional dresses (e.g. the Wieseltail dresses, Inuit parkas, etc.), head dresses, moccasins, basket designs, and tipi designs. The scope of exclusive rights over the designs differed, depending on whether they covered sacred or secular subject matter. In the latter case, it may include exclusive rights to reproduce the design, to make articles in which the design is embodied, and to publicly display such articles or the design. For a description of a customary law regime applicable to tipi designs, see Box 2.

BOX 2. TRADITIONAL TIPI DESIGNS

Elders of the Bloodtribe explicated IP-like provisions that apply to traditional tipi designs under their customary laws. "The tipi designs can only be created through a vision, a spiritual dreaming or as the results of a vision quest. The designs are very limited and they were handed down from years and years ago. We know the original owners of the tipi designs, they transferred the ownership to family friends, who then transferred them to the current owners. Anything we have now was transferred and the design cannot be replicated unless it is transferred through a ceremony. Those designs are ancient and sacred". According to the TK holders, the transfer ceremony is crucial since it symbolizes the assignment of exclusive rights over the design. "In the ceremony, I give my rights over to her [the transferee]. Once I do that, I transfer to her the right to use it. I can't even use that design: I cannot make a replica. It's not mine anymore, it's hers. She is only allowed to make a replica if the first one is destroyed, but she can't pitch two or ten tipis with the same design. There is only one, there cannot be a mass production of the design." The transfer ceremony appears to function as an assignment of the rights, since only the transferee can use it, and the transferee can prevent the transferor from using the design.

While certain details were confidential to the Bloodtribe, the Elders gave an example, "If I have a tipi design through vision quest, and Dorothy wants my design: she can send a messenger and ask for it to be transferred. If I agree she has to transfer it through a ceremony. Otherwise you have no right to use, depict or even talk about it." The Elders confirmed that such transfers of rights "can go inside or outside the family". At times exclusive rights to designs were transferred between different families and even nations. (Genbow Museum, Calgary, 24.11.98)

Counterparts at the FFM meetings reported frequent infringements of customary rights over traditional designs. Designs are commercially exploited by persons who have not acquired the rights through the necessary transfer procedures/ceremonies. For example, modern tents were being developed on the basis of traditional tipi designs, and scientists have conducted research and reproduced the designs for anthologies without having acquired the rights to do so. FFM participants also provided cases of illicit commercial exploitation of traditional designs in dresses, moccasins, baskets, carvings and other traditional objects.[6]

At the same time, FFM participants emphasized that they are not opposed in principle to traditional designs being commercialized. On the contrary, "it would be to our benefit to assist individuals and communities on our territories who wish to engage in commercialization and tourism." One caveat was however that sacred objects should never be reproduced. But, for example, "*..moccasins, beaded vests, etc. are traded and there's nothing wrong with that.*"[7] One participant pointed out that IPRs over TK could provide an incentive measure for development of small-and-medium sized enterprises in native territories along the 'nation-building model' of Native American development.[8]

Traditional medicine and ritual regimes (South Asia)

Further informal IP-like regimes protecting certain subject matter in the field of traditional medicine, were referenced by counterparts of the South Asia FFM. Experts distinguished between the *codified* systems of traditional medicine (which include indigenous and tribal medicine[9]) on the one hand and *non-codified* systems on the other. The codified systems include the Ayurvedic system of medicine, which is codified in the 54 authoritative books of the Ayurvedic System, the Siddha system, as codified in 29 authoritative books, and the Unani Tibb tradition, as codified in 13 authoritative books. [10] As shown in Box 5, each of these knowledge systems relates differently to formal and informal systems of protection. While the codified Ayurvedic, Siddha, and Unani Tibb systems are unique to South Asia, traditional medicine experts compared the indigenous medicinal traditions and the informal IP regimes which regulate them to similar regimes in other regions. They provided examples of informal IP-like protocols regulating the use of *uncodified* indigenous medicine.

BOX 3. EXCHANGE OF PROPRIETARY SONGS BETWEEN FIRST NATIONS

Counterparts on the North American FFM pointed out that songs were often exchanged and licensed between different tribes. "Often songs were given as gifts to other tribes who listened to our songs. But, this does not give them the right to appropriate songs. Today there is so much violation of these protocols." (Saskatoon, Canada, 24.11.98)

"Licensing of songs happens a lot through intermarriage. Because there is a tie between songs, names and resource allocation, there can be great competition and sometimes the conflicts are never resolved. Thus, tribes often seek to get new songs through intermarriage, for example through intermarriage between the Tulalip tribe and a tribe on Vancouver Island. But normally it's not a big problem, because tribes are very respectful of names and songs, whereas conflicts arise mostly over fish. Sometimes individuals get together and compromise, and sometimes the whole tribes get together and compromise". (Seattle, 22.11.98)

It was further suggested that informal IP regimes pervade South Asian indigenous medicinal traditions in the complex of rituals, magic and spiritual beliefs that surround indigenous medicine. They added that informal regimes are not directly analogous to their "formal" counterparts, but they perform an equally crucial function in the conception, promotion and diffusion of medical innovations in local and indigenous communities. They pointed out that informal innovators and traditional healers have to defend their innovations without the collective support of the formal IP systems, because local and indigenous communities mostly lack the administrative structures which are associated with the formal IPR-systems.[11]

BOX 4. ENFORCEMENT OF CUSTOMARY LAW

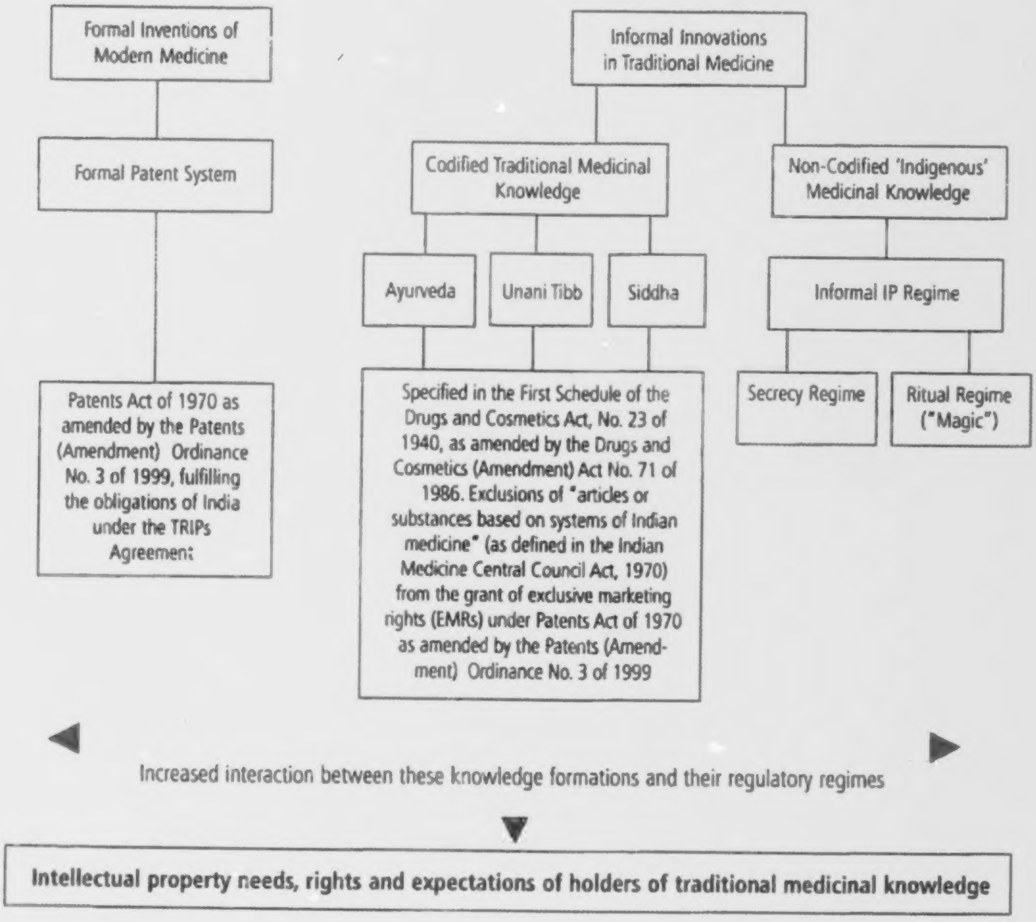
IP-related rights provided under customary law were enforced in First Nations through similar mechanisms as other rights granted under customary law (such as family rights, hunting rights, etc). A study on the traditional justice system among the Dene, which participants at the meetings provided, identified the following components:

- There was a clear set of rules that were designed to maintain harmony within the society and between the natural, animal and human worlds.
- The rules were carefully taught by one generation to the next and enforced by daily instruction, observation, and expectations of proper behavior.
- The senior members of the group dealt with offences; they judged the offence and determined what remedial actions had to be taken.
- In serious offences, there had to be public admission of guilt. The collective group was involved in speaking "harsh words" to the offender.
- Once guilt was admitted and appropriate remedial actions were defined by the group the individual had to restore harmony.
- Failure to comply resulted in shunning and, on occasion, banishment [equivalent to the death penalty].[12]

The first type of informal regimes which they identified are *secrecy regimes*. These operate independently of governmental regulation or even community support. The secrecy regime rests on the innovator's ability to prevent the public disclosure of his or her innovation. Under a secrecy regime, innovative healers employ their inventions by themselves only, and benefits arise for the healer only as long as the medicinal knowledge remains hidden.

It was pointed out by TK holders, however, that it is difficult to maintain secrecy within small communities, where close-range interaction and collaboration constrains the informal innovator's ability to conceal his innovation. Informal innovators often rely on modifications of traditional techniques, which have been passed down in the community. Therefore, would-be infringers may be able to imitate the innovation even after minimal observation. In contrast to secrecy, most formal IP-systems rely on collective intervention to maintain a comparative advantage on the marketplace for the original innovator. Modern patent law extends legal protection to precisely those ideas which are revealed in their entirety to the public and therefore lie beyond the limits of secrecy. By granting time-limited exclusive rights to the inventors once they have disclosed their ideas, patents ensure benefits for innovators while at the same time ensuring that the public gets access to the ideas.

Box 5. South Asian Systems of Medicine*


Formal Inventions of Modern Medicine
Formal Patent System
Patents Act of 1970 as amended by the Patents (Amendment) Ordinance No. 3 of 1999, fulfilling the obligations of India under the TRIPs Agreement
Informal Innovations in Traditional Medicine
Codified Traditional Medicinal Knowledge
Ayurveda
Unani Tibb
Siddha
Specified in the First Schedule of the Drugs and Cosmetics Act, No. 23 of 1940, as amended by the Drugs and Cosmetics (Amendment) Act No. 71 of 1986. Exclusions of "articles or substances based on systems of Indian medicine" (as defined in the Indian Medicine Central Council Act, 1970) from the grant of exclusive marketing rights (EMRs) under Patents Act of 1970 as amended by the Patents (Amendment) Ordinance No. 3 of 1999
Non-Codified 'Indigenous' Medicinal Knowledge
Informal IP Regime
Secrecy Regime
Ritual Regime ("Magic")
Increased interaction between these knowledge formations and their regulatory regimes
Intellectual property needs, rights and expectations of holders of traditional medicinal knowledge

* References to applicate laws based on the Indian context as of April 1999.

It was further pointed out during the meetings that in the absence of governmentally granted formal protection, ritual or magical components which form part of traditional medicine often allow traditional healers to control the use of their innovations in spite of full disclosure of their techniques within the local context. Because the value of ritual and magic relies primarily on social construction, the inclusion of ritual components in a medical innovation does not raise the research and practicing costs of a traditional healer. But the use by third parties of ritualized practices may be easier to control than the use of the phytochemical processes that accompany them within a traditional medicinal practice. For an example of ritualized protection for traditional medicinal practices, see Box 6.

BOX 6. RITUALIZED PROTECTION OF TK IN TRADITIONAL MEDICINE

The case of a traditional healer who practices in the Tumkur district of Karnataka was elaborated during the FFM to South Asia[13]. For more than 20 years, this healer has treated 50 to 60 patients a day and has developed a specialization on skin diseases, especially *psoriasis-type diseases*. He uses about 40 medicinal plants for oral and external application and produces each application individually for each patient. He only applies his formulations personally and, performs elaborate rituals during the treatment to obtain support from Laxmi, the goddess of wealth. His medicines are effective *only* in association with the appropriate ritual components. The only other practitioners who are authorized to use his relationship with Laxmi are his daughter and his son-in-law. The intangible property consisting of the rituals associated with his practices makes the healer's personal involvement mandatory in each use of his medical technology, even though the technology is fully disclosed. FFM findings suggest that in many traditional societies such ritual and magical powers are part of informal regimes of protection which apply to specific fields of technology, such as traditional medicine.

Some people consulted during the FFMs pointed out that, effectively, *ritual functions as a barrier to reverse engineering* – that is, as a mechanism which prevents the use and development of technologies based on imitation. However, in the local context and within supportive cultural frameworks, ritual regimes can create exclusive rights approximating those of modern patents which confer on their owners certain exclusive rights in relation to the products and processes, which constitute the subject matter of the patent: "to prevent third parties not having the owner's consent from the acts of: making, using, offering for sale, selling, or importing for these purposes that product" or process, respectively.[14]

Contrary to a commonly held view, numerous TK holders indicated that exclusive rights and monopoly powers over informal innovations are not uncommon within indigenous and local communities. Innovators and artists in the communities thereby manage to derive a fair and equitable share of the benefits arising from the use of their innovations within the community. These benefits do not normally take the form of royalties in the meaning of modern IP law. Rather, counterparts on the different FFMs named a wide variety of benefits for which traditional healers exchange their services, ranging from monetary payments, to commodities (food, trinkets, etc.), to event- and service-based benefits (improved access to infrastructures, dedicated feasts and celebrations, etc.), to non-monetary benefits (social prestige, political influence, etc.).

Participants in FFM meetings pointed out that rituals may require physical objects which the inventor can easily monopolize or elaborate procedures that are hard to copy without selective initiation. Thus the sale of ritualized medical services often represents an inverted form of the modern patent-exploitation strategy of "tying". In a tying arrangement, the patent holder makes access to his intangible property dependent on the purchase of tangible commodities that s/he could not otherwise monopolize. TK holders use an inverted strategy in the local context. Under a ritual regime, an informal innovator makes access to his innovation conditional on the purchase or involvement of a tangible object or condition which he can monopolize (since he cannot obtain governmentally granted rights over his intangible possessions).

It was furthermore explained that right holders of informal IPRs often derive benefits from their rights by transferring portions of their intellectual property to secondary practitioners. Thus, the licensing of medicine bundles, ritual talismans, fetishes, spiritual servants and other ritual objects is a common practice (see Box 7). Ritual formulas and incantations often are transferable and have the advantage of allowing extensive licensure (through the training of apprentices) without requiring inventors to give away unique commodities, such as tools or medicine bundles.

BOX 7. MEDICINE BUNDLES AND RITUALIZED TMK IN NORTH AMERICA

TK holders consulted during the North American FFM pointed out that the inheritance and transfer of "medicine bundles" within or between families is accompanied by the transmission of traditional medicinal knowledge and certain rights to practice, transmit and apply that knowledge. The ownership of the physical bundle is often attached to exclusive rights to exploit the products and processes associated with the TMK that the bundle signifies. Some TK holders pointed out that under certain circumstances, such bundles can be licensed to apprentices.

TK holders who participated in the FFM meetings explained that, like formal IPRs, the informal rights of traditional healers were not only transferable, but also enforceable. They explained that, on the most basic level, indigenous and local communities protect ritualized technology by creating consumer biases which build up barriers against infringement. A widespread belief in the importance of a technology's ritualized components will suppress demand for non-ritualized substitutes. Mystified risks often reduce infringements of rituals like the threat of litigation reduces infringements of formal IPRs. For example, through folk tales of great healers and the tragic failures of imitators, some societies depict ritualized technologies as risky and complex with high risks to potential infringers. Beyond belief systems, there are also material deterrents against infringement because authoritative practitioners and healers can summon social sanctions against infringers. Communities which practice rituals and magic also strive hard to eradicate so-called "witches", i.e. those who abuse ritual techniques and monopolies in ways which disrupt the social order. The meetings also revealed that the right holders of informal intellectual property hold quasi-legal penalties as enforcement measures (see Box 4 for an example of enforcement of customary laws).

In discussions with FFM counterparts it became apparent that the terms 'ritual' and 'magic' are labels which external observers, (and descriptions such as FFM reports) may apply to consistent and meaningful actions of a culture: for an allopathic practitioner, chanting a Mantra may be a magical ritual but to a local community it may simply be sound medical practice. Thus, local counterparts of the FFMs emphasized two points about ritual regimes as informal IP-like systems:

First, ritualized medicinal practices and technologies do not reflect an instrumental economic manipulation on the part of the traditional healer. The recognition of such regimes presumes no bad faith on the part of traditional practitioners. The healers as well as the communities are grounded in cultural practices and belief systems which instill the rituals with meaning, while they still protect the innovation. Similar shared cultural assumptions underlie the formal IP systems when creators refer to the cultural constructs of "authorship" and "originality" in order to obtain protection. From the intercultural perspective which TK holders considered necessary for an understanding of their IP needs, the reference to the attribute "original" under the formal IP system may function not unlike the attributes "sacred" or "magical" under some informal IP regimes. As one group of TK holders, based in Gujarat, India, submitted, "*the boundaries between formal and informal knowledge systems may often be false. The informal system may have formal rules waiting to be discovered. The formal system may have informal beliefs, accidents, or conjectures providing impetus for further enquiry.*"[15]

Second, there is no assumption that because informal IP-like protocols are culturally grounded, they have been collectively planned. They are informal regimes, which function in ways which are culturally consistent, but not "planned" and "rule-bound" in the sense of modern trade policies. The collective function of an intellectual property regime does not necessarily imply conscious policy decisions on the part of the community, just like the individual benefits which derive from it do not imply individual instrumentalism on the part of the traditional healer.

Customary law for traditional symbols and artistic works (Australia)

The FFM to the South Pacific also highlighted the importance and role of customary protection systems in Australia. In referring to Australian Aboriginal art, Golvan notes:

> *Under Aboriginal law, the rights in artistic works are owned collectively. Only certain artists are permitted within a tribe to depict certain designs, with such rights being based on statutes within a tribe. The right to depict a design does not mean that the artist may permit the reproduction of a design. This right to reproduce or re-depict would depend on permission being granted by the tribal owners of the rights in the design.*[16]

BOX 8. CUSTOMARY AND FORMAL IP SYSTEMS - MILPURRURRU V. INDOFURN (PTY) LTD.

The interface between customary and formal IP protection systems arose in respect of the issues of originality and authorship in traditional designs, and in respect of the assessment of damages.

As to originality and authorship, the Court found *that "although the artworks follow traditional Aboriginal form and are based on dreaming themes, each artwork is one of intricate detail and complexity reflecting great skill and originality"* (at 216). Justice Von Doussa found that customary and statutory approaches to authorship co-existed in the case before him and that the artists were "authors" for purposes of copyright and that each of the carpets reproduced was an original work.

In so far as the assessment of damages is concerned, the Court took account of the personal distress and embarrassment within the applicants' communities caused by the actions of the respondent. Justice von Doussa accepted anecdotal evidence that Aboriginal law and custom would treat each applicant equally and that the fruits of the action would be shared equally between them. Such treatment would not accord with copyright principles, but his Honor expressed his judgement in terms of the respondent's aggregate liability to the applicants as a group, and left it to the applicants to distribute the proceeds of the action *"to those traditional owners who have legitimate entitlements according to Aboriginal law to share compensation paid by someone who has without permission reproduced the artwork of an Aboriginal artist"* (at 240).

The Australian situation is made particularly interesting by a number of instances in which Aboriginal artists have sued non-Aboriginal parties for unauthorized use and exploitation of their traditional symbols and artistic works under Australian copyright law. In certain of these cases, the dialectic between customary Aboriginal protection and the formal IP system has been at the center of legal debate and the court's deliberations.

For example, in Milpurrurru v. Indofurn (Pty) Ltd.,[17] the respondent had imported approximately 200 carpets from Vietnam over a period of time. These carpets reproduced either all or parts of well-known works, based on creation stories, created by eight indigenous artists. The respondent had neither sought nor received permission to have the carpets made or imported. The indigenous applicants brought their action *inter alia* under the Australian Copyright Act, 1968. The Court, per Von Doussa J., found for the applicants. In the course of its judgement it made certain references to customary Aboriginal protection systems. The Court found that Aboriginal community mechanisms and indigenous law govern the production of imagery by regulating who has rights or authority in respect of particular designs. "*Painting techniques and the use of totemic and other images and symbols are in many instances, and almost invariably in the case of important creation stories, strictly controlled by Aboriginal law and custom*".[16] In addition, the interface between customary and formal IP systems were referred to in respect of originality, authorship and the assessment of damages - see Box 8 "Customary and Formal IP Systems - Milpurrurru v. Indofurn (Pty) Ltd.".

Notes

---

[1] An informant at the Roundtable Consultation on Intellectual Property and Traditional Knowledge at the Natural Law School of India University, Bangalore, India, 2.10.98.

[2] Australian Copyright Council (ACC). *Protecting Indigenous Intellectual Property. A Discussion Paper*. Redfern: ACC (September 1998): 11. The recognition of customary IP law is recommended as a third way, besides the "preservationist approach" and the "nationalist approach" to TK protection, which are both considered "problematic" (p.11).

[3] Meeting with Dr. Jacob Simet, Executive Director, National Culture Commission, Port Moresby, Papua New Guinea, June 26, 1998.

[4] Cree Elder at the Roundtable discussion at the Grand Council of the Cree, Montreal, 30.11.98

[5] Participant at the Roundtable at the Arctic Institute, University of Calgary, Calgary, 24.11.98

[6] For example, basket and weaving designs of the Tulalip nation in the USA are being reproduced by non-native commercial enterprises (Participants at the meeting at the Ethnic Cultural Center of the University of Washington, Seattle, 20.11.98); traditional moccasins designs of the Bloodtribe are being reproduced abroad (Meeting with members of the Bloodtribe at Glenbow Museum, Calgary, 24.11.98); Cree headgear is being exploited abroad without authorization (Calgary, 24.11.98), designs of Inuit parkas and *Amauti* (women's baby carrier/coat) are being commercialized in Canada and abroad (Iqualuit, 28.11.98).

[7] Meeting with Elders of the Bloodtribe, discussion at Glenbow Museum, Calgary, 24.11.98

[8] Participant at the Sixth Annual Tribal Environmental Protection Agency Conference, San Francisco, 8.11.98

[9] "The status of the Ayurveda system is quite distinct. Whereas Ayurvedic medicine is preventive and linked to astrology, indigenous medicine has no link to cosmological theory and is underpinned only by a hot-cold theory". Dr. U. Pilapituya, Director, One informant at the Bandaranaike Memorial Ayurveda Research Institute, Colombo, Sri Lanka, 29.9.98.

[10] In India the First Schedule of the Drugs and Cosmetics Act, No. 23 of 1940, as amended by the Drugs and Cosmetics (Amendment) Act No. 71 of 1986, specifies the authoritative books of the Ayurvedic, Siddha and Unani Tibb Systems.

[11] Meeting with officials of the Foundation for the Revitalization of Local Health Traditions (FRLHT), Bangalore, India, 1.10.98.

[12] Articles 28.1(a) and (b), TRIPS Agreement.

[13] Chand, V. S., et. al. "Farmers' Innovations for Sustainable Resource Management and Conservation of Biological Diversity". In, Fadani, Andrea and Heidhues, Franz, eds. *Food Security and Innovations. Successes and Lessons Learned*. Frankfurt: Peter Lang; 1997: 105.

[14] Golvan, C., "Aboriginal Art and the Protection of Indigenous Cultural Rights", 7 [1992] E.I.P.R.,p. 227-232.

[15] Milpurrurru v. Indofurn (Pty) Ltd. (1995) 30 IPR 209. Information and quotations concerning this case obtained from I. McDonald, *Protecting Indigenous Intellectual Property: A Copyright Perspective*, (Australian Copyright Council, Sydney, 1998) pp. 28-30 and 40-42.

[16] At p. 214.

Part II

Identifying the Intellectual Property Needs and Expectations of Traditional Knowledge Holders:

Results of the Nine Fact-finding Missions

This chapter reports on each of the FFMs undertaken. As the objective of the missions was to explore the "intellectual property needs and expectations" of TK holders, the information is presented in such a way as to make such needs and expectations as visible as possible.

As each mission was distinct, and reflected the diversity of contexts within which TK is created and of perspectives between communities, countries and regions, each FFM is reported on separately. (The only exception in this regard is the South American FFM, which comprised visits to Peru and Bolivia. As these took place at different times and were undertaken by different WIPO staff members, the Peruvian and Bolivian visits are reported on separately). At the same time, however, the information from each mission is arranged according to roughly the same organizational framework, to assist in ordering the information and to facilitate comparison between the missions. The sections on each of the missions present the information under more or less the following headings: Terminology and Subject Matter; Objectives of TK Protection; Benefits and Beneficiaries of TK Protection; Documentation; Means of Protecting TK; Management and Enforcement of Rights and Interests in TK; and, General.

At the beginning of each section, there appears a table showing the membership of the countries concerned of the main IP treaties and of other treaties and processes related to the protection of TK. The sections above on "Introduction to Intellectual Property" and "Other Relevant Multilateral Policy Areas and Initiatives" provide information on these treaties and processes. The treaties referred to in the tables are as follows:

International intellectual property treaties

- Paris Convention for the Protection of Industrial Property, 1883;
- Berne Convention for the Protection of Literary and Artistic Works, 1971;
- The International Convention for the Protection of Performers, the Producers of Phonograms and Broadcasting Organizations, 1961 (the "Rome Convention");
- Madrid Agreement Concerning the International Registration of Marks, 1891 andthe Protocol Relating to that Agreement, 1989;
- The Hague Agreement Concerning the International Registration of Industrial Designs, 1925;
- Patent Cooperation Treaty, 1970;
- The International Convention on the Protection of New Varieties of Plants, 1991 (UPOV Convention); and,
- The Agreement on Trade-Related Aspects of Intellectual Property Rights (the TRIPS Agreement), 1994. In the case of the TRIPS Agreement, the date indicated against each country in the tables is the date by when the country concerned was obliged, or will be obliged, to comply fully with its obligations under the Agreement.

International TK-related treaties and processes

- The Convention Concerning the Protection of the World Cultural and Natural Heritage, 1972 (UNESCO Heritage Conv.);
- The Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property, 1970 (UNESCO Cul.Property);
- Convention Concerning Indigenous Peoples in Independent Countries, 1986 (ILO Convention 169);
- Negotiations concerning the FAO's International Undertaking on Plant Genetic Resources (the IUPGR-FAO). The tables indicate whether the countries are participating in the negotiations or not;
- The Convention on Biological Diversity, 1992 (the CBD); and,
- United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, 1994 (the UNCCD).

The Interim Mission Reports in respect of each of the FFMs (see Chapter on "Methodology" above) are contained in Annex 4.

FFM to the South Pacific

Box 1. SOUTH PACIFIC FFM: COUNTRY MEMBERSHIP IN INTERNATIONAL IP TREATIES

International IP treaties	Australia	New Zealand	Fiji	Papua New Guinea
Paris Convention	1925	1931	-	1999
Berne Convention	1928	1928	1971	-
Rome Convention	1992	-	1972	-
Madrid Agreement	-	1931	-	-
The Hague Agreement	-	-	-	-
PCT	1980	1992	-	-
UPOV Convention	1989	1981	-	-
TRIPS Agreement	1996	1996	2000	2000

Box 2. SOUTH PACIFIC COUNTRY MEMBERSHIP IN TK-RELATED TREATIES AND PROCESSES

TK-related treaty/process	Australia	New Zealand	Fiji	Papua New Guinea
UNESCO Heritage Conv.	1974	1984	1990	1997
UNESCO Cul. Property	1989	-	-	-
ILO 169	-	-	1998	-
IUPGR – FAO	Yes	Yes	Yes	Yes
CBD	1992	1992	1992	1992
UNCCD	-	-	1998	-

The FFM to the South Pacific took place from June 15 to 26, 1998. The mission visited the following countries: Australia, New Zealand, Fiji and Papua New Guinea. The Interim Mission Report, which contains information as to the persons and entities with whom WIPO consulted, is included in Annex 4.

The information in this section is presented under the following headings: Terminology and Subject Matter; Objectives of TK Protection; Benefits and Beneficiaries of TK Protection; Documentation; Means of Protecting TK; Management and Enforcement of Rights and Interests in TK, and, General.

Terminology and Subject Matter

The need to define, or at least describe, the scope of the subject matter that TK holders, including indigenous peoples, wish to preserve and protect was expressed several times during the mission by persons consulted.

In addition, questions as to the appropriate terminology to use when discussing the protection of TK within the IP context were raised. Certain useful publications from Australia provided to WIPO before and during the mission also deal with these topics.[1]

There appears to broad agreement among TK holders in this region that their beliefs, knowledge systems, art and other forms of cultural expression form part of an integrated whole. Therefore, for example, the subject matter to be protected encompasses the rights of TK holders, including indigenous peoples, *". . . to their heritage. Heritage comprises all objects, sites and knowledge, the nature or use of which has been transmitted or continues to be transmitted from generation to generation, and which is regarded as pertaining to a particular Indigenous group or its Territory…The heritage of an Indigenous people is a living one and includes objects, knowledge and literary and artistic works which may be created in the future based on that heritage."*[2] The following were cited[3] as examples of what ought to be protected:

- literary, performing and artistic works, including songs, music, dances (such as the Maori "Haka" dance in New Zealand), and stories;
- traditional ceremonies;
- symbols, names and languages;
- etchings, paintings, weaving designs and designs on carpets and textiles;
- indigenous "styles";
- medicinal, scientific, agricultural, technical and ecological knowledge and associated biological resources;
- movable cultural property, including artifacts such as sea shells, emu eggs, nuts, wood carvings and other articles produced for cultural or ceremonial purposes;
- human remains and tissue;
- immovable cultural property (including sacred and historically significant sites and burial grounds); and,
- the documentation of indigenous peoples' heritage in archives, film, photographs, videotapes or audiotape and other forms of media.

IP NEEDS AND EXPECTATIONS # 1
Definition, or description, of "traditional knowledge" in IP context

IP NEEDS AND EXPECTATIONS #2
Identification and use of appropriate terminology

Terminology: In Australia, the term "indigenous cultural and intellectual property rights" has been suggested as an appropriate term to describe the above subject matter.[4] "Traditional knowledge" is not regarded as sufficiently encompassing and descriptive. In New Zealand, Maori claim rights in what is referred to in the Treaty of Waitangi 1840 as *taonga* ("all their treasures or treasured possessions")[5]. See Text Box "New Zealand - The Treaty of Waitangi."

Objectives of TK Protection

The desire to protect TK is motivated by one or more policy objectives, such as:

- prevention of erosion and disappearance of traditions, i.e. the conservation of traditions;
- prevention of unauthorized exploitation;
- stimulation and promotion of innovation and creativity based upon TK;
- protection from misappropriation, distortion and other prejudicial actions;
- protection and conservation of cultural and biological diversity; and,
- protection of the dignity and moral rights of traditional innovators and creators.

Certain informants more familiar with the IP system indicated that, as the IP system cannot assist in meeting some of these objectives, it would be necessary for TK holders to be provided with more information on the nature and role of the IP system, and on those objectives of TK protection that the IP system is or may be able to respond to. Several TK holders expressed interest in being provided with more information on IP. It was suggested to WIPO by TK holders and others that this could take place through, for example, awareness-raising and training programs on IP for TK holders. Informants added that a greater understanding of the role of IP would also serve to ensure that expectations in respect of the role of IP in TK protection are not raised to unrealistic heights.

Benefits and Beneficiaries of TK Protection

Identification of appropriate beneficiaries of TK protection: Discussions held on the mission indicated that this issue raises complex questions.[6] The communal origins of TK-based innovations and creations were mentioned as presenting obstacles to identifying individual beneficiaries, and the recognition of "community rights" was called for by several persons. However, it is recognized that the allocation of benefits to one community and not to another would also present difficulties, particularly where more than one community "owns" the innovation or creation. It was also pointed out that certain knowledge systems are common to more than one country and, in some cases, more than one region.

TK in the public domain: Many persons recognize the difficulties associated with attempting to protect TK, and associated genetic resources, that are already in the public domain. The kava plant was cited as an example.[7] This plant is cultivated and used in the Pacific Islands as part of Pacific Islands' culture and tradition, but has long been in the public domain. See further under "Regulation of access to and benefit-sharing in genetic resources" below.

Economic valuation of TK: The need was stressed for tools to determine the economic value of TK, associated natural resources and their contribution to the development of commercial products or processes. This was raised in respect of the kava plant[8] and almost all categories of TK.

IP NEEDS AND EXPECTATIONS #3
Provision of information on IP and on the IP aspects of TK protection to TK holders to adjust possibly high expectations

IP NEEDS AND EXPECTATIONS #4
Elaboration of tools to determine economic value of TK

Documentation

Many persons consulted expressed the strong need for the recordal and documentation of TK. Reasons given included that documentation was necessary to identify TK that requires protection; to preserve TK; and, to make TK accessible to others.[9]

Documentation was also viewed with suspicion by some, who indicated that documentation would disclose information to those who would make use of the information for their own gain.[10]

Several parties met with are engaged in documentation projects. To name two examples only:

- At a **Maori Writers' Workshop** in **Rotorua, New Zealand**, WIPO learned of the planned publication in the year 2000 of a two volume book in the Maori language. The volume will contain fictional and non-fictional writings about Maori history, culture, knowledge and society, for the purpose of promoting and preserving Maori language and culture.[11]
- **Wainimate** (Women's Association for Natural Medicinal Therapy) is an organization of traditional women healers in **Fiji**. The word "Wainimate" means "medicine" in Fijian. The organization works in Fiji and in other parts of the South Pacific, on request, to conserve medicinal plants, to promote the use of safe and effective traditional medicines, and to ensure that indigenous traditional medicinal knowledge and practices are respected and protected. Wainimate is involved in several documentation, training and awareness-raising activities. Its activities are centered around two main campaigns, "Save the Plants that Save Lives" and "Affordable Health for All by the Year 2000". It works closely with, amongst others, the World Wildlife Fund and the University of the South Pacific in Fiji. Representatives of the organization stated that the women healers have generally inherited their healing powers. They are holders of plant-based medici-

nal knowledge. Although they do not as a rule disclose their knowledge to outsiders, they wish to share their knowledge in an appropriate way to benefit others. In 1997, Wainimate published a traditional medicine handbook in Fijian.[12]

IP NEEDS AND EXPECTATIONS # 5
Legal/technical assistance with TK documentation projects

On several occasions, requests were made for legal/technical assistance with documentation projects.

Means of Protecting TK

NEW ZEALAND - THE TREATY OF WAITANGI

The claims brought by Maori under the Treaty of Waitangi in New Zealand place TK-related questions within a unique context. This treaty, signed in 1840 by representatives of the British Crown and Maori, provides *inter alia* for the full exclusive and undisturbed possession by Maori of "all their treasures or treasured possessions" *(taonga)*. Maori believe that the New Zealand Government has not honored all treaty obligations, and in 1975, the Waitangi Tribunal was established to hear claims under the treaty. One such claim, launched in 1991, relates to the ownership and control of Maori knowledge, traditions, culture, flora and fauna. This is the 262nd claim brought by Maori under the treaty and is colloquially referred to as "Wai 262." For Maori, one of the desired outcomes of the Wai 262 claim would be the development and implementation of a legal framework which recognizes and protects TK and other cultural and intellectual property rights of Maori. Whilst the Tribunal's findings are not binding upon the New Zealand Government, they have proven to be effective in influencing political and judicial change in support of Maori rights. The text of the Treaty is available at <http://www.govt.nz/nz_info/treaty.

Use of intellectual property

Persons consulted expressed varying views on whether IP could or should be used to protect TK. Some were of the view that IP was neither useful nor appropriate, while others were interested in testing the possible use of IP to protect TK.

IP not useful or appropriate: Views were expressed that the IP system, whether in its present form or in an amended form, is not suitable to meet the needs of indigenous peoples and other holders of TK. As one person stated: *"One should not attempt to amend Western laws to cater for indigenous peoples. Attempts to do so will be doomed, because the IP system and the needs of indigenous peoples are too distinct."*[13] In relation to the use of trademarks to protect Maori artistic works, symbols and designs, WIPO was told that Maori have concerns with the formal trademark system as it is *"not their system."*[14] See further under "*Sui generis* protection" below.

Testing the IP system for TK protection: On the other hand, it was suggested that, in the shorter term at least, attention be focussed on the extent to which the present IP system can be used to protect TK. Testing the present system would involve working directly with TK holders, including indigenous peoples and local communities, to (i) raise awareness, (ii) undertake practical and technical examinations of the application of the IP system to various categories of TK, and (iii) provide training on the IP system. The idea would be to develop and experiment with existing IP tools to protect TK in what was described as a "bottom up" approach.[15] It was suggested that international consensus on any new international norms is unlikely in the short term, and that only after workable solutions have been tested and proven at the local and national levels, would the evolution of an agreed international framework be more likely.

Government officials in Australia and New Zealand advised of their wish to work with communities to explore possibilities for the use by indigenous persons of the existing IP system. Government officials in Australia informed WIPO of the Federal Government's Access and Equity Strategy, under which *"all Australians, including those from a non-English speaking background or indigenous background, should receive a fair deal from Government services."*[16]

In terms of actual or suggested uses of IP by TK holders, or suggestions as to possible improvements, the following were mentioned:

Trademarks

Authentication marks: The registration of collective and certification trademarks to protect tradition-based innovations and creations is under active exploration in Australia and New Zealand.[17] WIPO learned subsequent to the mission that an Indigenous Label of Authenticity was launched in late 1999. The label has been developed by the National Indigenous Arts Advocacy Association (NIAAA) with the backing of the Aboriginal and Torres Strait Islander Commission (ATSIC) and the Australia Council for the Arts.[18] The use of such marks, as "authentication marks" is seen as effective to:

- maintain the cultural integrity of Aboriginal and Torres Strait Islander art;
- ensure a fair and equitable return to Aboriginal and Torres Strait Islander communities;
- maximize consumers' certainty as to the authenticity of Aboriginal and Torres Strait Islander-derived products and services;
- maximize the multiplicity and diversity of indigenous art; and
- promote an understanding, both nationally and internationally, of Aboriginal and Torres Strait Islander cultural heritage and art.[19]

IP NEEDS AND EXPECTATIONS #6
Testing use of present IP system for TK protection, through practical and technical community level pilot projects, case studies, training and awareness raising.

IP NEEDS AND EXPECTATIONS # 7
Examining and testing use of collective and certification trademarks to protect TK

IP NEEDS AND EXPECTATIONS #8
Examination of viability and efficacy of PIC requirement in applications for patents and other industrial property titles.

It was suggested at one of the meetings that much could be learnt from the experiences gained in the use, management and enforcement of "green labeling", and the International Standards Organization (ISO) standards, in respect of which the private sector has much experience.[20]

An example was given of an Aboriginal and Torres Strait Islander musical instrument, the didgeridoo, being manufactured and exported by non-Aboriginal and non-Torres Strait Islander persons, and the need was expressed for an authentication mark to attempt to control such activities.[21] The **Tiwi** artists with whom WIPO met at the **Arts Centre of the Munupi Arts and Crafts Association, Melville Island, Australia,** were creating an authenticity label which would be registered as a trademark, and developing rules for its use, management and enforcement.[22]

Several organizations are involved in activities and studies regarding the use of trademarks to protect tradition-based innovations and creations, such as NIAAA, the National Association for the Visual Arts (NAVA), the Association of Northern, Kimberley and Arnhem Aboriginal Artists (ANKAA) and DesArt. In New Zealand, the role of agencies involved in tourism in supporting the use of authentication marks came to the fore.

The need was expressed by TK holders to examine the usefulness of registered authentication marks in protecting TK, by way of community-level pilot projects and case studies.[23]

Prior informed consent (PIC) in trademark applications: It was suggested that applicants for trademarks be required to disclose any traditional symbols, signs or other materials used to create the mark applied for and to evidence that the PIC of the relevant community has been obtained for the application.[24] Government officials in New Zealand reported that as part of a review of the country's trademark legislation, the possibility of requiring PIC for trademark applications was being considered and Maori were being consulted. A PIC requirement could also be deployed in the case of patents (see below), industrial designs and geographical indications.

"Culturally offensive" trademarks: Government officials in New Zealand reported that marks that are culturally offensive to Maori could be refused registration under a proposed change to that country's trademarks legislation. However, certain informants were doubtful of suggestions that trademarks which incorporated or used the words, names and symbols of indigenous groups could be revoked or expunged for being "scandalous" or "contrary to good morals", two grounds for revocation and expungement generally found in national trade mark laws. For that reason, proposals are being considered to update those texts as part of the review of New Zealand's trademarks legislation. For example, the proposal of a Maori advisory group is that there should be an absolute ground for refusal to register a trademark the use of which is "likely to offend a significant section of the community, including Maori."[25]

Copyright

Use of existing copyright law: There is precedent in Australia for the use by indigenous Australians of copyright law to protect their rights and interest in artistic creations. In several relatively high-profile cases, Aboriginal and Torres Strait Islander persons in Australia have sued, through the Federal court system, non-indigenous parties for copyright infringement in respect of Aboriginal and Torres Strait Islander works.[26] These cases have shown that indigenous works do in certain circumstances qualify for copyright protection. The Australian Courts appear to have shown a measure of creativity in approaching such claims and some sensitivity to the customary laws, traditions and practices of the Aboriginal and Torres Strait Islander community in Australia. For example, see Text Box "Australia : Bulun Bulun and Milpurrurru v. R and T Textiles Pty Ltd., 1998" [27]

AUSTRALIA: BULUN BULUN AND MILPURRURRU V. R AND T TEXTILES PTY LTD., 1998

This case arose out of the importation and sale in Australia of printed clothing fabric which infringed the copyright of the Aboriginal artist, Mr. John Bulun Bulun, in his work "Magpie Geese and Water Lillies at the Waterhole". The applicants were Mr. Bulun Bulun and Mr. George Milpurrurru, both members of the Ganalbingu people. Mr. Bulun Bulun sued as legal owner of the copyright in the painting and sought remedies for infringement under the Australian Copyright Act, 1968. Mr. Milpurrurru brought the proceedings in his own name and as a representative of the Ganalbingu, claiming that they were the equitable owners of the copyright subsisting in the painting.

The respondents admitted to infringement of Mr. Bulun Bulun's copyright and consented to permanent injunctions against future infringement. In its defense to Mr. Milpurruru's actions, the respondent pleaded that as Mr. Bulun Bulun's claim had been satisfied, it was unnecessary to consider the question of the equitable ownership of the copyright. Mr. Milpurrurru sought to continue the action as a test case on the communal IPRs of indigenous Australian people. The principal questions for the court to address were whether the communal interests of traditional Aboriginal owners in cultural artworks, recognized under Aboriginal law, created binding legal or equitable obligations on persons outside the relevant Aboriginal community.

The assertion by the Ganalbingu of rights in equity depended upon there being a trust impressed upon expressions of ritual knowledge, such as the art work in question. The court considered there to be no evidence of an express or implied trust created in respect of Mr. Bulun Bulun's art. However, in an extensive *obiter dictum*, the court was prepared to impose fiduciary obligations upon Mr. Bulun Bulun, as a tribal artist, to his people. These were said to arise from the trust and confidence placed in him by his people that his artistic creativity would be exercised to preserve the integrity of the law, custom, culture and ritual knowledge of the Ganalbingu. The court concluded that this finding did not treat the law and custom of the Ganalbingu as part of the Australian legal system, rather it treated these matters as part of the factual matrix, characterizing the relationship as one of mutual trust and confidence from which fiduciary obligations arose. However, in dismissing the action of Mr. Milpurrurru, the court ruled that the rights of the Ganalbingu were confined to a right *in personam* against Mr. Bulun Bulun to enforce his copyright in works against third party infringers. As Mr. Bulun Bulun had successfully enforced his copyright, there was no occasion for the intervention of equity to provide any additional remedy to the beneficiaries of the fiduciary relationship.

Copyright, information technology and cultural heritage: The **Fine Arts School at the Northern Territory University in Darwin, Australia** has embarked on a pilot project to digitize Aboriginal and Torres Strait Islander art works held by it and other institutions, such as the **Museum and Art Gallery of the Northern Territory, Darwin, Australia** and to place such digitized works online in a secure Intranet environment to which Aboriginal and Torres Strait Islander groups would have access. The primary objective of this project is the visual repatriation and dissemination of the art works to the originating communities.[28] Copyright subsists in the digitized forms of the works concerned, aside from whatever copyright may subsist in the original works. Such "new" copyright would subsist in the hands of the person or institution carrying out the digitization and electronic storage, unless it is assigned to the relevant indigenous community or group. Depending upon how and for whose benefit such copyright is exercised, the digitization and storage of the works as described could facilitate the exercise and enforcement of rights in the original works.

Protection of databases: Compilations of data and information can be the subject of copyright protection. It was suggested therefore that the possible copyright protection of compilations of phrases and words of threatened indigenous languages (such as in phrasebooks and dictionaries) could support the preservation of endangered languages.[29]

Moral rights/*Domain public payant*: The moral rights concept of copyright law is also regarded by certain informants as being potentially useful for indigenous persons,[30] as is the *domain public payant* system[31], under which royalties continue to be paid for the use of literary and musical works in the public domain.[32]

Indigenous art markets/*Droite de suite*: The role of art dealers and auctioneers in the protection of indigenous artists was also raised. It was suggested that dealers and auctioneers should not facilitate the sale of non-genuine indigenous art works and should assist indigenous artists to obtain a fair return for their creativity. The *droite de suite* (a resale royalty, under which an artist receives a share of the price paid for his or her original work from all sales subsequent to the first sale of the work by the artist) was recommended as a means to assist indigenous artists.[33]

"Look and feel" protection: Complaints were made against the appropriation of Aboriginal and Torres Strait Islander "styles" by non-indigenous persons.[34] In this respect, it was suggested that the copyright protection afforded to the "look and feel" of software and other works under copyright law, could be invoked to protect Aboriginal and Torres Strait Islander "styles". The laws regarding **unfair competition** and **passing off** were also mentioned in this regard.[35]

Breach of confidence

In 1976, the Pitjantjatjara people of Australia brought a successful breach of confidence action against an anthropologist who had without authorization disclosed information given to him in confidence by the Pitjantjatjara. The information concerned tribal sites, and objects, communal legends, secrets, paintings, engravings, drawings and totemic geography.[36]

Patents

It was suggested on several occasions in all the countries visited that applicants for patents ought to be required to disclose any TK and/or associated genetic or biological resources used to produce the invention concerned, and in such cases, the applicant ought to demonstrate that he or she has the prior informed consent (PIC) of the originating provider community or person(s). Ways should also be developed to check the veracity of such disclosures and statements, and some argued that a patent application should be refused where a disclosure is shown to be untrue or incomplete, or where PIC has not been obtained.[37]

For an example on the use of the patent system by Maori in New Zealand[38], see Text Box "New Zealand – Maori and the Patent System" above.

NEW ZEALAND – MAORI AND THE PATENT SYSTEM

Certain Maori are working closely with the Cancer Genetics Research Team at the University of Otago, Dunedin, to find a cure for familial gastric cancer. An informant explained that she and her extended Maori family *(whanau)* have entered into a legal partnership with the Research Team to identify the relevant mutant gene, develop a test to identify carriers and screen, counsel and treat family members. The approximately 12 000 Maori involved in this project have provided the Research Team with relevant genealogical and medical information and have established a trust, the Kimihauora Trust. One aspect of the partnership between the Trust and the Research Team is that any patent rights obtained in respect of the processes for identifying the gene or testing carriers would be jointly owned. Any resultant financial benefits would go towards further research. The Kimihauora Trust receives extensive support and assistance from the New Zealand Gastroenterologists Association and the New Zealand Health Research Council.

Geographical indications

It was suggested that geographical indications might be useful in regulating the import and export of counterfeit and fake indigenous products, such as the Aboriginal and Torres Strait Islander musical instrument, the didgeridoo.[39] A PIC requirement in respect of geographical indications was also mooted.[40]

Customary law

There is a need to take customary law and practices into account, many persons advised.[41] One person expressed what many others seemed to believe, as follows:

> *"We have had songs, traditional knowledge and so on for hundreds of years. There was no doubt as to who originally owned them – they were originally owned by one person, who later passed them on to his or her clan. There were clear customary laws regarding the right to use the songs and the knowledge. There was no problem in the past. Why are there problems now? We should begin with communities, and see how they protected their cultural expressions and knowledge. Then we should use the same customary tools or tools adapted from them."*[42]

Sui generis protection

The need for new norms: While, as noted above, it was suggested that in the shorter term attention be focussed on testing the usefulness of the present IP system, it was also believed by several TK holders and others that in the longer term new norms would be needed, as the IP system would not meet all the needs of indigenous peoples and other TK holders. A separate system of rights may be needed, it was stated.[43] In this context, the point was also made that the need for the protection of TK should be understood and dealt

70

with within the context of indigenous peoples' needs in other domains, such as self-determination, health, justice and cultural heritage. In other words, some informants pointed out, the IP needs of TK holders cannot be dealt with in isolation from their other needs.

Folklore: In respect of folklore, attention was drawn to the 1982 Model Provisions for National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions of UNESCO and WIPO and the 1989 UNESCO Recommendation on the Safeguarding of Traditional Culture and Folklore.[44] These represent *sui generis* proposals for the protection of "folklore" and may be, it was suggested, a suitable base from which to consider norms for TK as a whole.

Regulation of access to and benefit-sharing in genetic resources

Concerns regarding the protection, preservation and commercial exploitation of biological and genetic resources were raised throughout the region. For example, the need for the protection of the kava plant, which is cultivated in most of the Pacific Island Countries, was raised in Fiji.[45] Kava is the ceremonial and social drink of several nations in the Pacific Islands, and its cultivation, properties and uses have become a central part of Pacific Island traditional knowledge. The plant has also been the subject of research and commercialization by Western researchers and firms since the middle of the 19th century. The medicinal and sedative properties of kava are well documented, and today there are a growing number of kava-based preparations in the European and U.S. markets, some of which have been patented.[46] However, Governmental and non-Governmental parties in Fiji wish to protect the plant and products derived from it for the benefit of Fijians and other Island communities, through patents, plant breeders' rights, or specific genetic resources access and benefit-sharing legislation. The needs for a regional framework of rights, and for retrospective protection and compensation for the loss of resources such as kava were also mentioned.[47] In this regard, several discussions were held on a draft "Sustainable Development Bill" prepared by the Fijian Department for the Environment. The Bill contains a chapter on access to genetic resources. Interest was expressed in assistance with the IP aspects of the legislation, and in holding a regional workshop on access to and benefit-sharing in relation to genetic resources, including on the relevant IP aspects.[48] WIPO was subsequently informed that the Bill was discussed in the Fijian Parliament during the November 1999 sitting and that discussions are expected to continue in 2000.[49]

IP NEEDS AND EXPECTATIONS #9
Study of customary laws and regimes and relationship between customary protection of TK and the IP system

IP NEEDS AND EXPECTATIONS #10
A *sui generis* system of rights to protect TK

IP NEEDS AND EXPECTATIONS # 11
IP advice and assistance in respect of legislation, agreements (including model terms), policy and processes on access to and benefit-sharing in genetic resources

In Australia, reference was made to debate concerning the utilization and commercialization of the smokebush plant. Aboriginal and Torres Strait Islander parties raised concerns that access by them to their traditional foods is restricted by legislation concerning national parks and wildlife.[50] In New Zealand, WIPO was told that Maori require permits to have access to and use natural resources, such as tree bark, feathers, whale bone and greenstone, used by them to create art works and musical instruments.[51]

While it was recognized by most persons consulted that no IPRs subsist in natural, biological and genetic resources as such, the need for advice on the IP aspects of genetic resource research, commercialization and transfer agreements (such as biodiversity-research agreements and material transfer agreements (MTAs)), and the elaboration of model contractual terms dealing with these aspects, were suggested.[52]

Contract

As mentioned above under "Regulation of access to and benefit-sharing in genetic resources", reference was made to the use of contract in the area of access to and benefit-sharing in genetic resources, and of the need for IP advice in this regard.

TK protection in other policy areas

In addition to views concerning possible uses that can be made of the IP system, WIPO learned of initiatives and processes in other policy areas that are or may be of relevance to the protection of TK. These initiatives and processes offer insights and lessons for TK-related activities with a focus on IP, but also demonstrate that TK protection issues extend well beyond the realm of IP:

- The centrality of access to and rights to **land** to indigenous peoples' rights in Australia was strongly apparent.[53] WIPO was referred *inter alia* to the decision in Mabo v. Queensland (No. 2)[54], in which it was held that Aboriginal and Torres Strait Islander ownership of land survived the colonization of Australia and recognized a form of property called "native title". The Court went on to hold that native title "has its origin in and is given context by the traditional laws acknowledged by and the traditional customs observed by the indigenous inhabitants of a territory."[55] This decision, and subsequent developments[56], have led to suggestions that "Aboriginal and Torres Strait Islander intellectual property rights may be recognizable by Australian law either as part of native title within the scope of the reasoning in the Mabo decision, or by analogy with it."[57]

  The Mabo decision led to the enactment of the Commonwealth Native Title Act, 1993. At the State level too, land legislation has recognized the claims of Aboriginal and Torres Strait Islander communities to their traditional lands, such as the Pitjantjatjara Land Rights Act (SA), 1981. The Commonwealth Aboriginal Land Rights (Northern Territory) Act, 1976 agreements reached between Aboriginal communities and the Northern Territory Government are to the effect that the communities own the land, but in some cases lease it back to the Government. Under this arrangement, the Aboriginal communities are entitled to continue to live undisturbed in traditional ways upon the land. However, attempts to put similar arrangements in place in other parts of Australia have not always succeeded. In addition, WIPO was informed that disputes exist as to the ownership of the biological resources found upon or in the land, such as plants, animals and minerals, in which the State Government and the Aboriginal and Torres Strait Islander communities both claim rights.[58] Examples were cited of instances in which biological resources were obtained and used for commercial exploitation without the consent of the Aboriginal and Torres Strait Islander community residing on the land concerned.[59] In this regard, the role of Land Councils in Australia seems central. The Land Councils in the Northern Territory were established in Australia in the 1970s to represent and promote Aboriginal and Torres Strait Islander interests, especially with respect to land issues.[60] Apart from Australia, informants advised that land issues are also relevant in most of the Pacific area.

- The relevance and potential utility of **cultural heritage policy and legislation** came to the fore. For example, cultural initiatives in Papua New Guinea were regarded as important in the preservation and protection of traditional cultures and knowledge systems. The **National Culture Commission of Papua New Guinea** advised WIPO that it had just embarked upon a 5 year program to promote the many cultures of Papua New Guinea (a country which has 600-700 tribes and as many languages), and a Cultural Policy is being drafted.[61] In Australia, it was suggested that Aboriginal and Torres Strait Islander Heritage Protection Act, 1984 and other related legislation could be used to protect aspects of Aboriginal and Torres Strait Islander knowledge and culture.[62]

Management and Enforcement of Rights and Interests in TK

The need for awareness-raising: The need for awareness-raising on the potential value of TK and associated genetic resources, and on ways in which local communities can regulate access to them, including awareness-raising in schools, was articulated many times. There is also a need for educational materials and for distance learning programs.[63]

Restriction of access to TK: It is recognized by many consulted that communities need to be able to restrict access to their knowledge and associated genetic resources if they wish to protect them and benefit from their possible commercial exploitation, but often, for economic and other reasons, they are unable to do so. The difficulties some communities have in regulating such access were often cited.

The ability of indigenous groups to protect their TK depends also upon their ability to organize themselves, i.e., their "organizational capital." As one person put it, *"what often stands in the way (of progress by indigenous persons in advancing their causes) is indigenous politics."* [64] A lack of organization hinders the ability of a community to develop and effectively advance shared objectives. However, as was also pointed out, any lack of "organizational capital" may be due also to outside interference in indigenous politics and the lack of resources within indigenous communities to develop and advance their objectives (see further under "Legal aid" below).

The important point was also made that there should not be an exclusive focus on restricting access to community knowledge and culture - a community also needs to impart information about itself for its own survival.[65]

IP NEEDS AND EXPECTATIONS #12
Awareness-raising on potential value of TK and on options for TK holders in this regard, including awareness raising at schools, educational materials and by way of Distance Learning programs

IP Needs and Expectations #13
Facilitating access to the IP system, to enable TK holders to use and enforce rights under the IP system

Legal aid: The need for indigenous groups and others to have the funding and resources to be able to enforce their legal rights was stressed several times. In Australia, there are some organizations which provide legal aid and assistance to Aboriginal and Torres Strait Islander litigants, but mainly do so in respect of land and criminal matters. For example, the **National Aboriginal and Islanders Legal Services Secretariat (NAILSS)** in **Australia** provides legal advice and representation to Aboriginal and Torres Strait Islander persons, mainly in criminal matters. NAILSS and other Aboriginal and Torres Strait Islander legal services in States and Territories have difficulty raising funds for cases concerning the protection of Aboriginal and Torres Strait Islander TK and culture.[66] NAILLS is supported and primarily funded by the **Aboriginal and Torres Strait Islander Commission (ATSIC)**. (See Text Box on the "Aboriginal and Torres Strait Islander Commission, Australia (ATSIC)"). It was also suggested that the private sector contribute towards funding Aboriginal and Torres Strait Islander legal services.[67]

Enforcement: Final year Sociology course students at **Macquarie University, New South Wales, Australia**, under the leadership of Professor Vivien Johnson, have developed a creative and original multimedia product, namely the "House of Aboriginality." The House of Aboriginality is an interactive educational CD-ROM[68] that contains a virtual domestic environment, an average Australian suburban home entirely furnished with products bearing Aboriginal or "pseudo Aboriginal" designs. The items featured in the House include copyright infringements of Aboriginal art, legally licensed Aboriginal artwork, and "Aboriginal-inspired" artwork. By traveling through the house and clicking on the different items, one can learn about each product, its author and origins. One can also learn to discriminate between genuine and fake Aboriginal

THE ABORIGINAL AND TORRES STRAIT ISLANDER COMMISSION, AUSTRALIA (ATSIC)

ATSIC is the peak representative indigenous agency in Australia and the premier policy-making body in indigenous affairs, the principal advisor to government and a powerful advocate of indigenous interests in Australia. It is a Commonwealth statutory authority responsible for administering many programs for Aboriginal and Torres Strait Islander people, in fields of *inter alia* health, housing, employment and education. The members of the 35 Regional Councils and the Torres Strait Regional Authority that comprise ATSIC are elected by Aboriginal and Torres Strait Islander people, who in turn elect the 17 Commissioners that make up ATSIC's board.

Information obtained from ATSIC's web site <http://www.atsic.gov.au>

products, and in this way become a "copyright detective." Professor Johnson and her students have written a manual "Hands Off – A Training Manual for Copyright Detectives" to complement the CD-ROM. The manual is based on the students' experiences as "copyright detectives" and is designed to introduce others to the basics of the law of copyright, Aboriginal art and the "spin offs" industry which has arisen to exploit commercially the popularity of Aboriginal imagery.[69]

Institutional arrangements: The need for an institution or institutions to manage and enforce rights and interests in TK was articulated many times. In this regard, in **Australia,** mention was made of the **Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS).** It was suggested that it could play a role in the management and enforcement of Aboriginal and Torres Strait Islander rights in their TK.[70] AIATSIS is an independent Commonwealth Government statutory authority devoted to Aboriginal and Torres Strait Islander studies. It is Australia's premier institution for information about the cultures and lifestyles of Aboriginal and Torres Strait Islander peoples. AIATSIS is governed by a Council consisting of nine members. A staff of approximately 70 people, directed by the Principal, engages in a range of activities of interest to Aboriginal and Torres Strait Islander people, scholars and the general public.[71]

Collective management of rights: Certain rights in the field of copyright, notably in respect of music and literary works, are managed collectively according to well-established principles and mechanisms. Given the collective nature of TK, it was suggested that collective management in the IP context might offer some pointers for the management and enforcement of rights in TK.[72]

IP NEEDS AND EXPECTATIONS #14
Study of collective acquisition, management and enforcement of IPRs in TK, with reference to collective management of IPRS

IP NEEDS AND EXPECTATIONS #15
Participation by TK holders, including indigenous persons, in WIPO's activities on TK, including in conceptualization and planning of such activities

General

On the participation by indigenous persons in the programs of international organizations concerning indigenous peoples' issues, it was stated several times that indigenous people, local communities and other TK holders must be able to participate meaningfully and effectively in regional and international meetings and processes concerning the protection of their TK, including in the planning and organization of such meetings.[73]

Notes

---

[1] See T. Janke, "Our Culture, Our Future", draft Discussion Paper prepared for the Australian Institute of Aboriginal and Torres Strait Islander Studies and the Aboriginal and Torres Strait Islander Commission, 1997; I. McDonald, *Protecting Indigenous Intellectual Property* (Australian Copyright Council, Sydney, 1997, 1998). The final version of "Our Culture, Our Future" was made available in September 1999. References in this Report are, however, to the 1997 draft Discussion Paper. Both "Our Culture, Our Future" and *Protecting Indigenous Intellectual Property* are valuable sources of information on Australian law and developments in relation to the protection of TK.

[2] Janke, *op. cit.* at p 25.

[3] Meeting with Tiwi artists, Art Center of the Munupi Arts and Crafts Association, Melville Island, Australia, June 16, 1998; *Hui* on the repatriation of Maori ancestral remains and Taonga Maori (Maori "treasures", meaning cultural and other properties), Te Papa Tongarewa, Wellington, New Zealand, June 20, 1998; meetings with Messrs. Vakabua, Ulitu and Cokanasiga, Ministry of Agriculture, Fisheries and Forests, Senator Korovulavula, the Fiji Performing Rights Association, and Mr. Nasome, the Department for the Environment, Suva, Fiji, June 23, 1998; Roundtable, Darwin, Australia, June 15, 1998; Roundtable, Sydney, Australia, June 18, 1998; meeting with Ms. Terri Janke, Solicitor, Michael Frankel and Company Solicitors, Ms. Libby Baulch, Australian Copyright Council and Ms. Caroline Morgan, Copyright Agency Limited, Sydney, Australia, June 17, 1998; Maori Writers Workshop, Rotorua, New Zealand, June 21, 1998; meeting with Wainimate, Suva, Fiji, June 23, 1998.

[4] Meeting with Ms. Terri Janke, Solicitor, Michael Frankel and Company Solicitors, Sydney, Australia, June 17, 1998. See also Janke *op. cit.* and McDonald *op. cit.*

SUMMARY OF INTELLECTUAL PROPERTY NEEDS AND EXPECTATIONS

1. Definition or description of "traditional knowledge" in IP context
2. Identification and use of appropriate terminology
3. Provision of information on IP and on the IP aspects of TK protection to TK holders to adjust possibly [illegible] expectations
4. Elaboration of tools to determine economic value of TK
5. Legal technical assistance with TK documentation projects
6. Testing use of present IP system for TK protection, through practical and technical community level pilot projects, case studies, training and awareness-raising
7. Examining and testing use of collective and certification trademarks to protect TK
8. Examination of viability and efficacy within IP context of PIC requirement in applications for patents and for other industrial property titles
9. Study of customary laws and regimes and relationship between customary protection of TK and the IP system
10. A *sui generis* system of rights to protect TK
11. IP advice and assistance in respect of legislation, agreements (including model terms), policy and processes on access to and benefit-sharing in genetic resources
12. Awareness-raising on potential value of TK and on options for TK holders in this regard, including awareness-raising at schools, educational materials and Distance Learning programs
13. Facilitating access to the IP system, to enable TK holders to use and enforce rights under the IP system
14. Study of collective acquisition, management and enforcement of IPRs in TK, with reference to the collective management of IPRs
15. Participation by TK holders, including indigenous persons, in WIPO's activities on TK, including in conceptualization and planning of such activities

BEST COPY AVAILABLE

[5] Meeting with Mr. Maui Solomon, Barrister, Ms. Del Wihongi, Mr. Martin Dawson, Mr. Leo Watson and Mr. Te Pere Curtis (Wai 262 claimants) and Ms. Aroha Mead, Manager, Cultural Heritage and Indigenous Issues Unit, Treaty Compliance Branch, Ministry of Maori Development, Wellington, New Zealand, June 19, 1998. See also D. Williams, "Matauranga Maori and Taonga: The Nature and Extent of Treaty Rights held by Iwi and Hapu in Indigenous Flora and fauna, Cultural Heritage Objects and Valued Traditional Knowledge", (January 1997); M. Solomon, "Understanding Indigenous Cultural and Intellectual Property Rights: Implications for Environmental Risk Management", Paper Presented at Conference on Environmental Risk Management, Auckland, New Zealand, June, 1998; M. Solomon, "Maori Cultural and Intellectual Property Claim: WAI 262". These papers were provided to WIPO during or in preparation for the mission.

[6] Meetings with Messrs. Vakabua, Ulitu and Cokanasiga, Ministry of Agriculture, Fisheries and Forests, Senator Korovulavula, the Fiji Performing Rights Association, and Mr. Nasome, the Department for the Environment, Suva, Fiji, June 23, 1998; Roundtable, Darwin, Australia, June 15, 1998; Roundtable, Sydney, Australia, June 18, 1998.

[7] Meetings with Mr. Joe Nawalowalo, the National Kava Council of Fiji, Mr. Lopeti Senituli of the Pacific Concerns Resource Center, Professor Bill Aalbersberg, the University of the South Pacific, other representatives of the University of the South Pacific, and representatives of the South Pacific Commission and the Forum Secretariat, Suva, Fiji, June 24, 1998.

[8] Meetings with Mr. Joe Nawalowalo, the National Kava Council of Fiji, Mr. Lopeti Senituli of the Pacific Concerns Resource Center, Professor Bill Aalbersberg, the University of the South Pacific, other representatives of the University of the South Pacific, and representatives of the South Pacific Commission and the Forum Secretariat, Suva, Fiji, June 24, 1998.

[9] Meeting with Dr. Gwenda Davey, the Coordinator of Folklife Studies at the National Center for Australian Studies at Monash University, Victoria, Sydney, Australia, June 17, 1998, and subsequent correspondence.

[10] Roundtable, Sydney, Australia, June 18, 1998.

[11] Maori Writers' Workshop, Rotorua, New Zealand, June 21, 1998.

[12] Meeting with Wainimate, Suva, Fiji, June 23, 1998; Document entitled "Wainimate Profile", April, 1997, provided to WIPO during the meeting referred to; "Wainibula" (Wainimate Newsletter), Vol. 2, No.3, September 1997 and Vol. 3, No.1, January 1998.

[13] Roundtable, Sydney, Australia, June 18, 1998.

[14] Meeting with the Ministry of Commerce, the Office of Treaty Settlements, Creative New Zealand, the Crown Law Office, the Ministry of Foreign Affairs and Trade, the Office of the Prime Minister and the Ministry of Cultural Affairs, Wellington, New Zealand, June 19, 1998.

[15] Roundtable, Sydney, Australia, June 18, 1998.

[16] S. Farquhar, "Certification and Authentication Trade Marks and Industrial Property Protection of Arts and Cultural Expression", paper presented at the International Conference on Artistic and Cultural Expressions, Traditional Knowledge, and Protection of Heritage, September 27-29, 1996, University of Queensland, Australia. Ms. Farquhar is the Director, External Relations, IP Australia.

[17] Meeting with Ms. Susan Farquhar, Director, External Relations, and Ms. Judy Barrett, Assistant Director Development & Legislation, of IP Australia, Darwin, Australia, June 15, 1998, Roundtable, Darwin, Australia, June 15, 1998; Roundtable, Sydney, Australia, June 18, 1998; Meeting with representatives of the following units of the Ministry of Maori Development: Waitangi Treaty Compliance, Indigenous and Cultural Affairs, Economic Development, Monitoring and Legal and Law Reform, June 19, 1998, Wellington, New Zealand; Meeting with the Ministry of Commerce, the Office of Treaty Settlements, Creative New Zealand, the Crown Law Office, the Ministry of Foreign Affairs and Trade, the Office of the Prime Minister and the Ministry of Cultural Affairs, Wellington, New Zealand, June 19, 1998; Telephone call with Ms. Kathryn Wells, July 27, 1998. See also Janke *op.cit*; McDonald *op. cit* and Farquhar, *op.cit*.

[18] See <http://www.niaaa.com.au/label.html>

[19] Proposal made by the National Indigenous Arts Advocacy Association (NIAAA), reproduced in Janke, *op. cit.*, p. 78. See also comment on Draft Report by Ms. Jane Anderson, PhD student, School of Law, University of New South Wales, Australia.

[20] Roundtable, Sydney, Australia, June 18, 1998.

[21] Roundtable, Darwin, Australia, June 15, 1998.

[22] Meeting with Tiwi artists, Art Center of the Munupi Arts and Crafts Association, Melville Island, Australia, June 16, 1998.

[23] Meeting with Ms. Susan Farquhar, Director, External Relations, and Ms. Judy Barrett, Assistant Director Development & Legislation, of IP Australia, Darwin, Australia, June 15, 1998; Meeting with Tiwi artists, Art Center of the Munupi Arts and Crafts Association, Melville Island, Australia, June 16, 1998.

[24] Meeting with Ms. Terri Janke, Solicitor, Michael Frankel and Company Solicitors, Sydney, Australia, June 17, 1998.

[25] Meeting with the Ministry of Commerce, the Office of Treaty Settlements, Creative New Zealand, the Crown Law Office, the Ministry of Foreign Affairs and Trade, the Office of the Prime Minister and the Ministry of Cultural Affairs, Wellington, New Zealand, June 19, 1998. Further information was provided in a comment on the draft Report from the New Zealand Government, dated December 8, 2000.

[26] Bulun Bulun v. Neilam (Pty) Ltd, Federal Court of Australia, 1989; Yumbulul v. Reserve bank of Australia (1991) 21 IPR 481; Milpurrurru v. Indofurn (Pty) Ltd. (1995) 30 IPR 209; and, Bulun Bulun & Milpurrurru v. R and T Textiles (Pty) Ltd., van Dousa J, Federal Court of Australia, unreported, September 3, 1998.

[27] See M. Blakeney, "What is traditional knowledge? Why should it be protected? Who should protect it? For whom? Understanding the value chain?", paper presented at WIPO Roundtable on Intellectual Property and Traditional Knowledge, November 1 and 2, 1999.

[28] Meeting with Ms. Margie West, Curator of the Aboriginal art collection of the Museum and Art Gallery of the Northern Territory, Darwin, Australia, June 16, 1998.

[29] Meeting with Ms. Terri Janke, Solicitor, Michael Frankel and Company Solicitors, Sydney, Australia, June 17, 1998.

[30] Meeting with the Ministry of Commerce, the Office of Treaty Settlements, Creative New Zealand, the Crown Law Office, the Ministry of Foreign Affairs and Trade, the Office of the Prime Minister and the Ministry of Cultural Affairs, Wellington, New Zealand, June 19, 1998.

[31] Meeting with Dr. Gwenda Davey, the Coordinator of Folklife Studies at the National Center for Australian Studies at Monash University, Victoria, Sydney, Australia, June 17, 1998, and subsequent correspondence.

[32] See also "Folklife: Our Living Heritage", Report of the Committee of Inquiry into Folklife in Australia", 1987, p.264 ff.

[33] Meeting with Mr. Peter Cooke, Caring for Country Executive Officer, and Mr. Greg Carter, Legal Advisor, of the Northern Land Council, Darwin, Australia, June 16, 1998. See Article 14*ter*, Berne Convention for the Protection of Literary And Artistic Works, 1971.

[34] Roundtable, Darwin, Australia, June 15, 1998. Roundtable in Sydney, Australia, June 18, 1998.

[35] Roundtable in Sydney, Australia, June 18, 1998.

[36] Foster v. Mountford (1976) 29 FLR 233. See also McDonald, *op. cit.*, pp. 24 - 25.

[37] Meetings with Mr. Narube, Ministry of Finance; Messrs. Vakabua, Ulitu and Cokanasiga, the Ministry of Agriculture, Fisheries and Forests; Senator Korovulavula, the Fiji Performing Rights Association; Mr. Banuve, the Solicitor General's Office; Messrs. Rabuka, the Deputy Permanent Representative of Fiji to the United Nations in New York, and Koyamaibole, Ministry of Foreign Affairs; Mr. Nasome, the Department for the Environment; and, Ms. Kuridrani, the Department for Fijian Affairs, Suva, Fiji, June 23, 1998. Meetings with Mr. Joe Nawalowalo, the National Kava Council of Fiji, Mr. Lopeti Senituli of the Pacific Concerns Resource Center, Professor Bill Aalbersberg, the University of the South Pacific and representatives of the South Pacific Commission and the Forum Secretariat, Suva, Fiji, June 24, 1998; Meeting with Ms. Terri Janke, Solicitor, Michael Frankel and Company Solicitors, Sydney, Australia, June 17, 1998.

[38] Meeting with Ms. Maria Te Aranga Tini, Rotorua office of the Ministry of Maori Development, Rotorua, New Zealand, June 21, 1998.

[39] Roundtable, Darwin, Australia, June 15, 1998.

[40] Meeting with representatives of the following units of the Ministry of Maori Development: Waitangi Treaty Compliance, Indigenous and Cultural Affairs, Economic Development, Monitoring and Legal and Law Reform, Wellington, New Zealand, June 19, 1998.

[41] Roundtable, Sydney, Australia, June 18, 1998.

[42] Meeting with Dr. Jacob Simet, Executive Director, National Culture Commission, Port Moresby, Papua New Guinea, June 26, 1998.

[43] Roundtable, Sydney, Australia, June 18, 1998.

[44] Meeting with Dr. Gwenda Davey, the Coordinator of Folklife Studies at the National Center for Australian Studies at Monash University, Victoria, Sydney, Australia, June 17, 1998.

[45] Meetings with Mr. Narube, Ministry of Finance; Messrs. Vakabua, Ulitu and Cokanasiga, the Ministry of Agriculture, Fisheries and Forests; Senator Korovulavula, the Fiji Performing Rights Association; Mr. Banuve, the Solicitor General's Office; Messrs. Rabuka, the Deputy Permanent Representative of Fiji to the United Nations in New York, and Koyamaibole, Ministry of Foreign Affairs; Mr. Nasome, the Department for the Environment; and, Ms. Kuridrani, the Department for Fijian Affairs, Suva, Fiji, Monday, June 23, 1998; Meetings with Mr. Joe Nawalowalo, the National Kava Council of Fiji, Mr. Lopeti Senituli of the Pacific Concerns Resource Center, Professor Bill Aalbersberg, the University of the South Pacific and representatives of the South Pacific Commission and the Forum Secretariat, Suva, Fiji, June 24, 1998.

[46] See also: "Proceedings of the Indigenous Peoples' Knowledge and Intellectual Property Rights Consultation", Organized by the Pacific Concerns Resource Center, Suva, Fiji, April 24-27, 1995; "Indigenous Peoples' Knowledge and Intellectual Property Rights in Relation to the Kava Plant", Peteru, C., submitted to WIPO on behalf of the National Kava Council of Fiji with the permission of Mr. Lopeti Senituli, Director, Pacific Concerns Resource Centre, Suva, Fiji; Proceedings of the 15th Annual Networking Conference "Our Knowledge, Our Rights: Traditional Knowledge and Pacific Peoples", South Pacific Peoples Foundation, 1998; Report of the First Meeting of the Working Group on Intellectual Property Rights, organized by the South Pacific Commission (SPC) and the Pacific Regional Agricultural Programme (PRAP), Suva, Fiji, May 5-7, 1997.

[47] Meetings with Mr. Narube, Ministry of Finance; Messrs. Vakabua, Ulitu and Cokanasiga, the Ministry of Agriculture, Fisheries and Forests; Senator Korovulavula, the Fiji Performing Rights Association; Mr. Banuve, the Solicitor General's Office; Messrs. Rabuka, the Deputy Permanent Representative of Fiji to the United Nations in New York, and Koyamaibole, Ministry of Foreign Affairs; Mr. Nasome, the Department for the Environment; and, Ms. Kuridrani, the Department for Fijian Affairs, Suva, Fiji, June 23, 1998.

[48] Meetings with Mr. Narube, Ministry of Finance; Messrs. Vakabua, Ulitu and Cokanasiga, the Ministry of Agriculture, Fisheries and Forests; Senator Korovulavula, the Fiji Performing Rights Association; Mr. Banuve, the Solicitor General's Office; Messrs. Rabuka, the Deputy Permanent Representative of Fiji to the United Nations in New York, and Koyamaibole, Ministry of Foreign Affairs; Mr. Nasome, the Department for the Environment; and, Ms. Kuridrani, the Department for Fijian Affairs, Suva, Fiji, June 23, 1998.

[49] Communication from Ms. Kesaia Tabunakawai, December 19, 1999.

[50] Roundtable, Sydney, Australia, June 18, 1998.

[51] Meeting with the Ministry of Commerce, the Office of Treaty Settlements, Creative New Zealand, the Crown Law Office, the Ministry of Foreign Affairs and Trade, the Office of the Prime Minister and the Ministry of Cultural Affairs, Wellington, New Zealand, June 19, 1998.

[52] Meeting with Mr. Joe Nawalowalo, the National Kava Council of Fiji, Mr. Lopeti Senituli of the Pacific Concerns Resource Center, Professor Bill Aalbersberg, the University of the South Pacific and representatives of the South Pacific Commission and the Forum Secretariat, Suva, Fiji, June 24, 1998; Meeting with Messrs. Vakabua, Ulitu and Cokanasiga, Ministry of Agriculture, Fisheries and Forests, Suva, Fiji, June 23, 1998; Maori Writers Workshop, Rotorua, New Zealand, June 21, 1998.

[53] Roundtable, Darwin, Australia, June 15, 1998; Roundtable, Sydney, June 18, 1999.

[54] (1992) 175 CLR 1.

[55] *Ibid.*, per Brennan J, 58.

[56] Native Title Act, 1993; Wik Peoples v. State of Queensland (1996) 141 ALR 129.

[57] Gray, Stephen, "Recognizing Aboriginal Intellectual Property", paper given by the author to WIPO, June, 1998.

[58] Roundtable, Darwin, Australia, June 15, 1998, Meeting with Mr. Peter Cooke, Caring for Country Executive Officer, and Mr. Greg Carter, Legal Advisor, of the Northern Land Council, Darwin, Australia, June 16, 1998.

[59] Meeting with Mr. Peter Cooke, Caring for Country Executive Officer, and Mr. Greg Carter, Legal Advisor, of the Northern Land Council, Darwin, Australia, June 16, 1998.

[61] Meeting with Dr. Jacob Simet, Executive Director, National Culture Commission, Port Moresby, Papua New Guinea, June 26, 1998.

[62] Roundtable, Darwin, June 15, 1998. *See also* Janke *op. cit.*, p. 48ff; McDonald, *op. cit.*, 38ff and 64ff.

[63] Roundtable, Darwin, Australia, June 15, 1998; Meeting with Tiwi artists, Art Center of the Munupi Arts and Crafts Association, Melville Island, Australia, June 16, 1998; Roundtable, Sydney, June 18, 1998; Meeting with Wainimate, Suva, Fiji, June 23, 1998; Meeting with Mr. Joe Nawalowalo, the National Kava Council of Fiji, Mr. Lopeti Senituli of the Pacific Concerns Resource Center, Professor Bill Aalbersberg, the University of the South Pacific and representatives of the South Pacific Commission and the Forum Secretariat, Suva, Fiji, June 24, 1998.

[64] Roundtable, Sydney, Australia, June 18, 1998.

[65] Maori Writers Workshop, Rotorua, New Zealand, June 21, 1998.

[66] Roundtable, Darwin, Australia, June 15, 1998; Meeting with Mr. Geoffrey Atkinson, National Solicitor, NAILSS, Sydney, Australia, June 17, 1998; "WIPO Fact Finding Mission: Traditional Knowledge, Innovations and Culture", document provided by NAILSS to WIPO during the mission.

[67] Meeting with Ms. Terri Janke, Solicitor, Michael Frankel and Company Solicitors, Sydney, Australia, June 17, 1998.

[68] See also the House of Aboriginality web site:<http://www.mq.edu.au/house_of_aboriginality>.

[69] Meeting with Professor Vivien Johnson, Sydney, Australia, June 17, 1998. *"Hands Off – A Training Manual for Copyright Detectives"* (House of Aboriginality, Macquarie University, 1997).

[70] Roundtable, Sydney, Australia, June 18, 1998.

[71] Information obtained from AIATSIS's web site <http://www.aiatsis.gov.au>

[72] Roundtable, Sydney, June 18, 1998.

[73] For example, meeting with Ms. Liz Ngata and Ms. Aroha Riley, Auckland office of the Ministry of Maori Development, and Ms. Moana Sinclair and Mr. Tony Sinclair, Auckland, New Zealand, June 22, 1998.

FFM to Eastern and Southern Africa

Box 1. Eastern and Southern African FFM: Country Membership in international IP treaties

International IP treaties	Uganda	Tanzania	Namibia	South Africa
Paris Convention	1965	1963	-	1947
Berne Convention	-	1994	1990	1928
Rome Convention	-	-	-	-
Madrid Agreement	-	-	-	-
The Hague Agreement	-	-	-	-
PCT	1995	1999	-	1999
UPOV Convention	-	-	-	1977
TRIPS Agreement	2006	2006	2000	1996

Box 2. Eastern and Southern African FFM: Country Membership in TK-related treaties and processes

TK-related treaty/process	Uganda	Tanzania	Namibia	South Africa
UNESCO Heritage Conv.	1987	1977	-	1997
UNESCO Cul. Property	-	1977	-	-
ILO 169	-	-	-	-
IUPGR – FAO	No	No	No	Yes
CBD	1993	1996	1997	1995
UNCCD	1997	1997	1997	1997

The FFM to Eastern and Southern Africa took place from September 4 to 20, 1998. The mission visited the following countries: Uganda, Tanzania, Namibia and South Africa. The Interim Mission Report, which contains information as to the persons and entities with whom WIPO consulted, is included in Annex 4.

The information in this section is presented under the following headings: Terminology and Subject Matter; Objectives of TK Protection; Benefits and Beneficiaries of TK Protection; Documentation; Means of Protecting TK; and, Management and Enforcement of Rights and Interests in TK.

Terminology and Subject Matter

The scope and meaning of the term "traditional knowledge" was discussed throughout the mission. Reference was made by TK holders and others to the holistic nature of traditional "heritage" or "culture", which comprises both aesthetic (the arts) and useful (the technological, medicinal and scientific) elements, as well as tangible (such as medicinal plants) and non-tangible (such as medicinal knowledge) components.

The relationship between "traditional knowledge" and "folklore" was also raised by persons consulted, and it appeared that there are varying interpretations of what is meant by these terms.[1] Some regard "folklore" as limited to elements of artistic heritage only (this is the meaning of folklore in the 1982 UNESCO-WIPO Model Provisions for National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions ("the Model Provisions")), while for others "folklore" includes technological and scientific knowledge and beliefs. For example, traditional bone-setting technology was described by one person as an example of local "folklore."[2] Persons in two countries described folklore and traditional knowledge in terms of language - *"folklore is a tribal language or expression"*[3], *"traditional knowledge is like a language, it can be learnt with dedication"*[4] Additionally, a wide variety of subject matter was included within the term "traditional knowledge", such as:

- dispute-settlement processes and methods of governance;
- folksongs, dances, ceremonies;
- musical instruments;
- dress design, ornaments, handicrafts;
- traditional methods of hairstyling;
- traditional methods of preparing food, spices and drinks, meat-cutting techniques;
- the denotion of numbers by finger language;
- languages;
- historical sites;
- handicrafts;
- the medicinal use of plants;
- grazing systems, animal tracking; and,
- environmental and biodiversity conservation-related knowledge, such as knowledge of grass species, weather patterns, and knowledge relating to the preservation and use of genetic resources.

IP NEEDS AND EXPECTATIONS #1
Clear definition or description of what is meant by the term "traditional knowledge" in the IP context

IP NEEDS AND EXPECTATIONS #2
To provide information and training to TK holders on IP and on the possible relevance of IP to TK protection

It was mentioned by TK holders that several of these subject areas, such as music, dance, traditional ways of problem-solving and medicinal knowledge, are interrelated in a spiritual way.[5]

As only some of these items are or could be the subject matter of IP protection, persons consulted indicated the need to define, or at least describe, what is meant (or not meant) by "traditional knowledge" for purposes of IP and WIPO's work in this area.[6]

Objectives of TK Protection

The mission demonstrated that the protection of TK is desired with a variety of objectives in mind. For some, protection is necessary to prevent the erosion and disappearance of traditions, i.e. for the conservation of traditions. For others, TK protection is seen as a means of preventing unauthorized exploitation. Other objectives include: stimulation and promotion of innovation and creativity based upon TK; protection from misappropriation, distortion and other prejudicial actions; protection and conservation of cultural and biological diversity; and, the protection of the dignity and moral rights of traditional innovators and creators.

BEST COPY AVAILABLE

It was explained by the WIPO representatives on the mission that IP cannot assist in meeting some of these objectives. For example, IP protection cannot *per se* prevent the erosion and disappearance of traditions, nor can it directly preserve or conserve cultural and biological diversity, although IP protection may assist in meeting some of these objectives. There is thus a need to identify the aspects of the protection of TK, and those objectives for TK protection, that the IP system is or may be able to respond to. It is also necessary to communicate the IP system's actual and potential role effectively to TK holders and other stakeholders. To do otherwise, would run the risk of raising false expectations as to the role of IP and of WIPO (see also under "TK protection in other policy areas" below). In this regard, TK holders indicated a desire to learn more about IP and its possible relevance to the field of TK protection.

Many wish to protect TK for more than one reason. For example, traditional healers, indigenous communities and others working at the nexus of traditional medicine and modern medicine believe TK ought to be protected to halt a decline in respect for traditional remedies and healing methods, to preserve and promote traditional medicine as complementary to modern health practices and to prevent unauthorized exploitation of traditional medicinal knowledge. It is believed by some of the persons met with that traditional remedies can play a part in curing or treating various illnesses, including AIDS. Traditional healers and indigenous communities are willing to collaborate with modern health practitioners and the pharmaceutical industry to share information and experiences, but they are concerned that their knowledge will be expropriated without any acknowledgement or economic benefit. Protective measures should be in place before such healers would be willing to collaborate with outsiders.[7]

TRADITIONAL HEALERS WORKING AT THE NEXUS OF TRADITIONAL AND "MODERN" MEDICINE

"Traditional and Modern Health Practitioners Together Against Aids" (THETA), based in Kampala, Uganda, is an NGO working with traditional healers and conventional health practitioners in the fight against AIDS and other diseases. It began in 1992 as a clinical study evaluating the effectiveness of local herbal treatments for selected AIDS-related symptoms. THETA's objectives are to improve and strengthen traditional medicine as a complementary healthcare practice and to research, document and disseminate information about traditional medicine. Through its activities, the organization hopes to see traditional medicine as a dignified practice in order for communities in Uganda and Africa as a whole to benefit from the best of both traditional and conventional health practices and a mutually respectful cross-referral of patients between traditional healers and conventional health practitioners.

Meeting with members of "Traditional and Modern Health Practitioners Together Against Aids" (THETA), Kampala, Uganda, September 5, 1998)

Benefits and Beneficiaries of TK Protection

A range of views was expressed on the nature of the benefits that local communities ought to receive from the use and commercial exploitation of their TK. One person perhaps captured the essence of what most persons said:

> *"Local communities want acknowledgement that their knowledge is theirs, and they want a fair return for access to and use of their knowledge and biological resources. A 'fair return' may in the short term include assistance with basic needs such as housing, services, money and/or transport, while in the medium and longer terms it would mean training, technology transfer, and ongoing financial benefit from commercial exploitation."*[8]

The point was also made that the utilization of TK related to natural resources should be carried out in a sustainable way.[9]

However, apart from the question of possible benefits, is the question of beneficiaries. Who will or should benefit from protected TK? Almost all persons consulted acknowledged that the identification of appropriate beneficiaries of TK protection raises complex questions. In this respect, the communal origins of TK-based innovations and creations was mentioned as presenting obstacles to identifying individual beneficiaries. Thus, the need for the recognition of "community rights" was frequently cited, but even in this regard it is recognized that the allocation of benefits to one community and not to another may present difficulties. It was also pointed out that certain knowledge systems are common to more than one country and, in some cases, more than one region. To name one example only, traditional healers and herbalists in Uganda recognize that their knowledge of the medicinal and other properties of the neem tree is shared widely in parts of Asia and elsewhere.[10] It is thus clear that, whether TK is protected under the existing IP system or a *sui generis* system, difficulties in allocating benefits based upon communally and widely-held TK may persist.

The question "who are the beneficiaries?" also led to another set of issues, namely what certain persons saw as the competing interests of different stakeholders, such as TK holders (who are local communities and/or indigenous peoples), the private sector and Governmental agencies, including Governmental research and other institutions.[11] Concern was raised by TK holders and their representatives that Governmental support for the protection of TK was based upon a desire to protect TK for the benefit of the State, and not for the benefit of the TK holders themselves. Criticism was also leveled at the private sector and at Governmental research institutions involved in exploiting and commercializing innovations and creations based upon TK, without sharing any resultant benefits with local communities. TK holders argued strongly for greater Governmental support for the protection of TK for the benefit of TK holders, and many Governmental spokespersons expressed their wish to provide such support.

IP NEEDS AND EXPECTATIONS #3
Facilitation of dialogue and contact between TK holders, the private sector, Governments, NGOs and other stakeholders

IP NEEDS AND EXPECTATIONS #4
Information on the economic valuation of TK for purposes of IP benefits

It appeared that at the root of some of these points is a lack of information on and understanding of the viewpoints and perspectives of other stakeholders. Several persons believe that greater dialogue, contact and information-exchange between the stakeholder groups would assist.

Economic valuation of TK: An issue related to the assessment of benefits is the need for the economic valuation of TK and, particularly, of its actual contribution to the development of a certain commercial product or process. It was pointed out too that in many cases the use to which a TK holder might have put a natural resource may differ from the uses identified after screening by a third party, such as a pharmaceutical company. In such a case, what is the contribution of the TK holder, and how does one value it for purposes of determining the benefits due to the TK holder, if any? [12]

Documentation

Calls for TK documentation: The need for the documentation of TK was repeated often during the mission.[13] However, calls for documentation were prompted by various objectives, including:

- to identify the TK that requires protection;
- to preserve TK for future generations;
- to make TK available for research and educational purposes;
- to prevent the acquisition of IPRs over TK. See further under "Defensive publication" below.

BEST COPY AVAILABLE

Legal/technical assistance with documentation projects was requested many times.[14]

IP implications of documentation: A few persons raised the need for local communities to understand fully the IP implications of TK documentation projects. For example, in whom do the IPRs in the documented TK vest? What effect does documentation and publication of TK have on the ability of others, including the TK holders, to obtain IPRs over the documented TK should they wish at a future time to do so?

"Defensive publication": Certain TK holders and their service organizations are embarking upon documentation projects to prevent the acquisition by other parties of IPRs, particularly patents and industrial designs, over the TK. WIPO was advised that TK is being documented and made publicly available with the intent that the TK falls into the public domain, forms part of the searchable "prior art" and thus anticipates the novelty of inventions based upon the TK[15] (for information on patents and industrial designs, particularly the concepts "public domain", "novelty" and "prior art", see "The Intellectual Property System" above.) This practice is sometimes referred to as "defensive publication". However, as was pointed out by certain persons, placing the TK in the public domain also prevents the originating community from applying for IPRs if it ever wanted to do so. In other words, once the novelty is lost, it is lost both for outside parties and the original TK holders. Such "defensive publication" would be an example of use of the present IP system to prevent the acquisition of any IPRs over TK, if that is the desired goal.

Documentation projects: WIPO learned of several ongoing documentation projects, such as the following:

The **Department of Botany of Makerere University, Kampala, Uganda**, has for several years been involved in broad ethnobotanical research amongst the Batwa, Bakonjo and Bamba communities in the Semiliki and Rwenzori National Parks, which lie in the south-west of Uganda. The Department's research activities have included documentation of the communities' knowledge concerning the nutritional, medicinal and other properties of the plant genetic resources found in the two Parks. The documentation is undertaken by a team comprising staff of the Department and representatives of the local communities. So far, the documented knowledge has been made publicly available by the University for academic research. The representatives of the Department with whom WIPO met wish to ensure that the local communities concerned share in any benefits that may accrue from the commercial exploitation of their knowledge. The Department is involved in the Ugandan chapter of a recently created African Network of Ethnobotanists, which comprises ethnobotanists, traditional healers, herbalists, Government representatives and lawyers, to promote and coordinate ethnobotanical research in Africa.[16]

In **South Africa, the Research Group for Traditional Medicines** has established a database on traditional medicinal knowledge to enhance the output of the Research Group's core activity, namely research into traditional medicine and its possible role in alleviating conditions that are a particular burden to local society, such as malaria and tuberculosis. The Research Group, which is based at the Faculty of Medicine at the University of Cape Town, was established by the Medical Research Council in 1991. The University of the Western Cape also participates and contributes to the work of the Research Group. The Group conducts research into traditional medicinal knowledge, and aims to: provide a scientific infrastructure for the beneficial utilization of such knowledge in the interests of public health; establish mutual understanding between traditional and "conventional" healers and break down prejudices against traditional healing; provide a basis for recognition and protection of traditional healers; and, provide an intellectual "home" for young scientists. Representatives of the Research Group advised that the purpose of the database is to provide a product which can be used by researchers, governmental and non-governmental organizations, health professionals, traditional healers, and the general public. They acknowledged that it will be impossible to control the use to which the knowledge is put without appropriate benefit-sharing agreements in place. The Group is working on reaching formal agreements with the traditional healers with whom it is in contact under which the establishment of a trust is envisaged with equal representation of the Group and healers.[17]

Opposition to TK documentation: However, some people are opposed to documentation. They believe that there should be no documentation until appropriate protective measures are in place, or else documentation would merely facilitate the unauthorized exploitation of the TK. These persons displayed suspicion of documentation initiatives, and one or two indicated that they had in the past provided persons conducting documentation with false information. One person stated that documentation was not necessary because "We know" (what is our traditional knowledge and what is not).[18] Certain persons articulated this point in terms of the need to keep TK secret, in the form of "trade secrets" or "undisclosed information" which are protected under IP law.[19]

Means of Protecting TK

Use of intellectual property

Views expressed on the use of IP to protect TK covered a range of approaches.

These may be categorized as follows:

- IP will be ineffective in protecting TK;
- IP is unsuitable as a means to protect TK/Use of the IP system to prevent the acquisition of IPRs;
- IP can be used to protect TK.

IP Needs and Expectations #5
Information and advice on the IP implications of TK documentation

IP NEEDS AND EXPECTATIONS #6
Legal/technical assistance with documentation projects

IP NEEDS AND EXPECTATIONS #7
Any measures to protect TK must be enforceable by TK holders, working with their support organizations, their communities, and Governments in a combined effort

IP will be ineffective in protecting TK: Several persons referred to difficulties with the enforcement of conventional IPRs in their countries, pointing to widespread music, literature and computer software piracy as examples. It was pointed out that some of the countries visited have old and outdated IP legislation which was only then being amended to conform with the TRIPS Agreement, with which developing countries had to comply by January 1, 2000.[20] On the other hand, problems with enforcement go beyond the law and extend to human and other resources within enforcement agencies and other factors. Others expressed a sense of "disappointment" with the IP system, citing examples of cases in which their works have been exploited without any acknowledgement or financial reward.[21]

There seems to be doubt in the minds of many consulted that the IP system, not seen as effective in preventing the infringement of conventional IP rights, can serve as an effective model or tool for the protection of new subject matter such as TK. The need for TK holders to be able to enforce any measures to protect TK was stressed many times.[22]

IP is unsuitable as a means to protect TK/Use of the IP system to prevent the acquisition of IPRs: Some persons are critical of the present IP system. They believe that the system is unsuitable as a modality to protect TK because of what they regard as the system's private property, exclusive rights and individual author/inventor-centric nature. One of the bases expressed for this criticism was that TK and the kind of innovation and creativity that the IP system was established to protect are too different. Certain of these persons are critical of the IP system *per se*, while others expressed opposition merely to its deployment in the TK arena. The latter stressed the holistic and communally-shared nature of TK, which, they said, should not become the subject of private IPRs in the hands of outside parties. They believe that TK should remain in the public domain, freely available to be shared, used and disseminated.[23] See also under "*Sui generis* protection" below.

BEST COPY AVAILABLE

The IP system can be used to protect TK: Many TK holders are interested to learn more about the IP system and, if possible, to benefit from it. Most TK holders consulted had little or no information on the IP system. Many requests were made for more information and for training on the IP system, particularly on options it may offer for the protection of TK for the benefit of TK holders. It is recognized that some forms of TK are already protected by the IP system. Similarly, many officials representing the national IP offices requested more information on how the IP system can protect TK. While it was acknowledged that certain forms of TK may not be protectible under the IP system, it was believed that many forms might be. Persons who were consulted identified an overriding need to test, in a technical and practical manner, the usefulness of the existing IP system.[24]

Several more specific suggestions were made as to how the IP system could be used to protect TK or how it could be modified to better protect TK. It is believed by persons consulted that these possibilities ought to be studied further:

- in the field of **patents**, the introduction of a Prior Informed Consent (PIC) requirement was suggested. Under this requirement, an applicant for a patent for an invention based upon or derived from TK and/or genetic resources would have to prove that he or she has the prior and informed consent of the community from whom the TK or resources were obtained for the application. The legal and procedural efficacy and viability of such a requirement would need to be investigated. In relation to industrial property in general, reference was made to the *Organization Africaine de la Propriete Intellectuelle (OAPI)* (please see the chapter on the FFM to West Africa) and the African Regional Industrial Property Organization (ARIPO). In regard to ARIPO, please see the text box "The African Regional Industrial Property Organization (ARIPO)" below;

THE AFRICAN REGIONAL INDUSTRIAL PROPERTY ORGANIZATION (ARIPO)

ARIPO is an inter-governmental organization that was created (at that time under a different name) at Lusaka, Zambia on 9 December, 1976 (the Lusaka Agreement). Membership of the Organization is open to all African States members of the United Nations Economic Commission for Africa (ECA) or the Organization of African Unity (OAU). ARIPO is empowered to grant patents and register industrial designs on behalf of its 15 contracting parties.

The contracting parties of ARIPO at the present time are: Botswana, The Gambia, Ghana, Kenya, Lesotho, Malawi, Mozambique, Sierra Leone, Somalia, Sudan, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe.

The objectives of the Organization include:

- the modernization, harmonization and development of the industrial property laws of its Member States;
- fostering the establishment of a close relationship between the Member States in matters relating to industrial property;
- establishment of common services or organs for the co-ordination, harmonization and development of industrial property activities affecting its members;
- the promotion and evolution of a common view and approach among the Member States to industrial property matters;
- assisting its members in the acquisition and development of technology relating to industrial property.

ARIPO is a member of the Paris Convention and the PCT and may be designated in PCT International Applications.

Adapted from ARIPO website <www.aripo.wipo.net> and other materials

- within the field of **copyright**, it was suggested that moral rights protection, which is not provided for in some countries, would assist in the protection of folkloric works and performances (for information on "moral rights" in copyright, see "The Intellectual Property System" above).
  In addition, the protection of works in oral (i.e., unfixed) form was seen as potentially beneficial. International copyright law, as reflected in the Berne Convention for the Protection of Literary and Artistic Works, 1971, allows States Party to the Convention to grant copyright protection to oral works. However, the copyright laws of most countries require that a work be fixed in material or other form before being eligible for protection, largely because rights in works are more susceptible of proof (in infringement actions, for example) where the works are fixed in some form and not merely oral. However, it was felt that the protection of oral works would protect many forms of TK;
- the potential usefulness of **geographical indications** to protect tradition-based innovations and creations, as well as natural resource-based products, was also raised many times during the mission. One person expressed the view that geographical indications would not be a workable tool in respect of products derived from natural resources found or grown within more than one country, unless the countries entered into a regional agreement or understanding in this regard;
- as already mentioned under "Documentation", some persons believe that TK ought to be kept secret, and hence protected as a **"trade secret"** or **"undisclosed information"**.[27]

Customary law and practice

Many persons consulted alluded to "informal" and customary regimes, practices and laws which have served to nurture, protect and regulate access to TK. For example, according to custom, folksongs in Uganda are classified into 10 categories according to their nature and uses. Musical instruments are also divided into those which may be played by "the monarchy" and those by "the commoners". Dances also have their own respective significance and uses (for example, for weddings, funerals and naming ceremonies), and custom forbids the performance of such dances outside their customary context.[28] Reference was also made to the "functionality" of traditional music.[29]

IP Needs and Expectations # 8
Information and training on specific options for the protection of TK by the existing IP system, for TK holders and Government officials

IP Needs and Expectations # 9
Testing of options for the protection of TK by the IP system

IP Needs and Expectations # 10
Study of relationship between customary regimes protecting TK and the IP system

The interface, and possible tensions, between customary regimes, practices and laws, on the one hand, and the "formal" IP system, on the other, were touched upon on a few occasions but not discussed in detail. However, the need to study this question further was highlighted.

Sui generis protection

General: As mentioned above, several people voiced opposition to the IP system and declared it unsuitable to protect TK (see under "Use of the IP system" above). Calls were made for some form(s) of *sui generis* protection that would take into account the particular nature of TK and needs of TK holders. Reference was made to "indigenous rights"[31] and "community rights" systems.[32]

South Africa: In South Africa, draft legislation on the Protection and Promotion of South African Indigenous Knowledges has been prepared. This legislation refers *inter alia* to the relationship between the protection of indigenous knowledge (IK) and South African IP law; the establishment of a Regulatory Authority on Indigenous Knowledges of South Africa; the protection of IK against various unauthorized acts; Collective Community Administration Agencies to represent the rights of communities; the establishment of a Directorate of Indigenous Knowledges within the Department of Trade and Industry; and, the creation and maintenance of a Registry of IK.

BEST COPY AVAILABLE

The legislation has been drafted as part of a Governmental initiative to promote and protect "indigenous knowledge". The Indigenous Knowledge Systems Programme (the IKS Programme) was established in 1996 under the direction of the Parliamentary Portfolio Committee on Arts, Culture, Language, Science and Technology. The IKS Programme aims at the codification of indigenous knowledge in South Africa, the protection and promotion of IK within a legal framework, the harnessing of IK in rural development and in international trade by promoting the establishment of rural, small and medium-sized enterprises around those technologies that are viable, the demystification of science and technology within the African community and the restoration of African culture and knowledge within the South African superstructure. An audit of South African indigenous technologies, completed in June 1998, identified 35 such technologies. A National Workshop was held in Mafikeng, South Africa in September, 1998, and a Southern African sub-regional conference is planned for 2000.[33] The relevant Government officials expressed a strong interest in information and assistance from the international community in developing this legislation further

Declaration and Draft Model Law on Community Rights and Access to Biological Resources of the Organization of African Unity (OAU): This draft regional legislation may also be described as a *sui generis* initiative. The draft Model Law was prepared by the OAU's Scientific, Technical and Research Committee (the STRC) and was issued, accompanied by the Declaration, in March 1998. The articles of the Draft Model Law cover *inter alia* access to biological and genetic resources and related community knowledge and technologies (Article 4), community rights (Article 5), institutional arrangements (Article 6), and the establishment of a national information system (Article 7). The OAU has expressed interest in receiving legal-technical assistance in the further development of the draft.

UNESCO/WIPO Model Provisions for National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions, 1982 ("the Model Provisions"): The protection of "expressions of folklore" by means of legislation following or based upon the Model Provisions was referred to many times. Several African (as well as other) countries provide for the protection of expressions of folklore,[34] generally within their copyright laws. Such provisions are often based upon the Model Provisions which provide for the protection of expressions of traditional artistic heritage. There is a strong desire that expressions of folklore be adequately protected, both nationally and internationally, and many stated that the Model Provisions could serve as a useful basis for the elaboration of norms and standards for the protection of "folklore" and TK in general.

Regulation of access to and benefit-sharing in genetic resources

Amidst concerns for the state of the environment and particularly the depletion of the earth's biological diversity, and in the light of the Convention on Biological Diversity, 1992 (the CBD), several persons consulted pointed to the links between the regulation of access to and benefit-sharing in genetic resources and the protection of associated TK. Many Governmental and non-Governmental processes and activities regarding the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising from the use of genetic resources are underway.[35] Some persons pointed to what they see as tensions and conflicts between the CBD and the TRIPS Agreement.[36] WIPO learned *inter alia* of the activities of task forces, consultations, White Papers[37], and other initiatives aimed at elaborating appropriate policies and legislation on biodiversity conservation, including on the regulation of access to and the use of genetic resources. Of relevance here too is the OAU's Declaration and Draft Model Law on Community Rights and Access to Biological Resources referred to above under "*Sui generis* protection". It was also mentioned that, in some cases, natural resources such as medicinal plants are regarded as falling under Governmental, not community, jurisdiction. In such cases, traditional healers are required to obtain Government permits which allow them to collect medicinal plants.[38]

IP NEEDS AND EXPECTATIONS # 11
Provision of IP information, assistance and advice to Governmental authorities in respect of regional, sub-regional and national initiatives to protect TK

IP NEEDS AND EXPECTATIONS #12
Use of Model Provisions as a basis for elaboration of norms and standards for protection of TK

BEST COPY AVAILABLE

Two points emerged clearly from discussions on these subjects:

- At the national and regional levels, TK protection is receiving significant attention in biodiversity-related, environmental and conservancy policies and laws;
- However, as Governmental officials from the national IP offices pointed out, as such policies and laws are being developed under the auspices of and with the assistance of Governmental and non-Governmental entities exclusively involved in the protection of the environment and/or biological diversity, it appears that the IP aspects and implications of such policies and laws are receiving little consideration. Such officials suggested the need for the national IP offices and the IP community (in the form of IP rightsholders and users) to become more involved in such processes.

Contract

Many people pointed out that contractual arrangements – in the form of licenses, material transfer agreements, information transfer agreements and the like - offer real possibilities for TK holders to protect access to and unauthorized use of TK. While it appeared that certain TK holders are prepared to impart their knowledge freely and without restriction, and others refuse to disclose at all, several TK holders are interested in disclosing their TK only in exchange for acknowledgement and some measure of economic benefit provided their rights and interests are protected under contract.[39] One traditional healer advised that he dispenses his medicines by way of a written contract which precludes the recipient from receiving any information on how the medicines were prepared.[40]

However, as the relative bargaining strengths of local communities and outside parties, such as commercial entities, tend to diverge widely, strategies are needed to support local communities in the field of contracts. This was attested to by several NGOs and other development agencies many of whom indicated their willingness to assist in this regard.[41] Suggestions include the following:

- assistance and training for TK holders in the negotiation, drafting, implementation, and enforcement of contracts;
- the development and testing, with the close involvement of local communities, of "best contractual practices" and guidelines and model clauses for contracts.

It was also pointed out that it might be helpful to study national laws prohibiting "unfair contract terms".[42] Under unfair contract terms legislation, found in several countries, obligations, conditions, penalties and other contractual clauses deemed to be "unfair" may be declared void or unenforceable. It was suggested that such laws might also strengthen the contractual capacity of TK holders.

USE OF CONTRACT TO PROTECT TK

Certain NGOs advised that they are already engaged in assisting local communities in contractual negotiations. For example, in **Namibia, CRIAA Southern Africa Development and Consulting (CRIAA SA-DC)** assists local communities to commercially and sustainably exploit natural botanical resources. Until such time as Namibia completes its access and benefit-sharing legislation as envisaged by the CBD, the NGO enters into contracts with third parties such as research, development and commercial organizations on behalf of communities unable to do so themselves. Any proceeds received from commercialization of resources would be paid into a trust fund, or some other mechanism as might be agreed between stakeholders, for the benefit of the local community.

IP Needs and Expectations # 13
Greater participation by the national IP offices and the IP community in processes concerning the development of biodiversity-related, environmental and conservancy policies and laws.

IP Needs and Expectations #14
Assistance and training for TK holders in the negotiation, drafting, implementation and enforcement of contracts.

TK protection in other policy areas

In addition to IP or IP-type modalities for the protection of TK, persons consulted provided WIPO with views and information on processes, initiatives and undertakings in other policy areas that are or may be relevant for the protection of TK. These included:

- **human rights:** often within the frame of broader political, economic, and social concerns amongst indigenous peoples, local communities and other minority groups, certain persons referred to developments within the human rights context, and of their relevance for the protection of TK.[43] Reference was made *inter alia* to the activities of the United Nations Working Group on Indigenous Populations;
- **cultural heritage**: some persons spoke of TK within the context of what they perceive as the erosion of traditional cultures, practices and ways of life as a result of several historical or current factors, such as colonization, Government policies aimed at "modernization" and "development", religions which did not recognize traditional religious beliefs, the growing prevalence of Western culture and "globalization", in South Africa the policy of *apartheid*, the waning of the oral tradition, and the weakening of respect for traditional ways among the youth. Persons suggested that the protection of TK should form part of broader initiatives to restore and protect traditional cultures and heritage. Many initiatives are being undertaken by museums, national monuments councils, art galleries, dance troupes, schools and others, aimed at the promotion, protection, conservation, preservation and dissemination of culture and cultural heritage. Suggestions to promote traditional cultures included broadcast quotas (under which, for example, a minimum quantity of local music or audiovisual material must be broadcast each day), increased budgets for Ministries of Culture, and tax deductions for private sector sponsorship of the arts.[44] WIPO was also provided with copies of certain policy and other documents. For example, a policy document of the Ministry of Education and Culture, Tanzania, entitled "Cultural Policy" and issued in 1997, provides *inter alia* that "Traditional knowledge, skills and technology which are environmentally friendly shall be identified and their use encouraged."[45] In Namibia, WIPO was furnished with a copy of a draft "Policy on Arts and Culture in Namibia", dated February, 1998, which includes as one of its objectives, the "safeguarding, promotion and extension of Namibia's physical, linguistic and spiritual heritage."[46] The Southern African Development Community (SADC) is also preparing policies, strategies and priorities for the sector of culture, information and sport, including in respect of cultural heritage;[47]
- **land issues**: the close link between land, the resources found upon it and TK was made clear several times. As communities are displaced from their traditional lands, their knowledge formations are lost.[48]

It is clear that the IP system cannot address many of these issues. However, this is a point not appreciated by some of the persons consulted. It is thus necessary to identify the role that IP is or may be able to play and to communicate that role effectively. See under "Objectives" above, and IP Needs and Expectations #2 in this chapter.

Management and Enforcement of Rights and Interests in TK

Organizational capacity of TK holders: Under the heading "Contract" above, it was pointed out that WIPO was advised that many TK holders lack basic contract negotiation, drafting and implementation skills. As a result, such TK holders are unable effectively to regulate access to their TK and negotiate equitable benefit-sharing arrangements. However, contractual skills apart, the inability of communities to regulate access to and use of their TK and associated biological resources for economic, social and political reasons also emerged as a key concern. As many persons consulted pointed out, the economic and social circumstances of local communities are such that they are without the organizational, economic and political strength to control access to their TK and to meaningfully exercise and enforce any rights that may be of benefit to

BEST COPY AVAILABLE

them.[49] On many occasions, local communities have, due *inter alia* to their economic circumstances, disclosed TK to outside researchers and others, often for immediate "once off" financial compensation, without any subsequent acknowledgement or fair, longer-term return. A point forcefully made several times during the mission was the need for communities to be enabled, at a practical level, to control access to their knowledge and resources. Without such control, legal and other remedies are unlikely to be of much assistance, WIPO was told.

Commercial value of TK; Awareness-raising: Linked to the previous point is that not all TK holders are aware of the potential economic value of their TK. It was apparent to WIPO that several TK holders are not aware of the possible commercial applications of TK (whether in the pharmaceutical, agricultural or chemical fields, or the entertainment industry, for example) can put TK.[50] In this regard, the need was identified for enhanced awareness-raising concerning the potential value of TK, why outside parties may be interested in obtaining access to TK and what options a TK holder might have if approached by an outside party. These options would depend upon whether the TK holder wishes to grant access to his or her TK and why. It was suggested that such awareness-raising should take place in cooperation with or through local NGOs, community-based organizations (CBOs) and other local partners. It was suggested that even raising awareness amongst local communities and indigenous peoples as to their basic right to deny access to their TK and genetic resources ("the right to say 'no'"), if that is what they wish, would be helpful for local communities. Another facet to awareness-raising was plans by a Governmental agency for education, at primary and tertiary schooling, on the importance and cultural value of the country's traditional handicrafts, art and other cultural expressions.[51]

It was, however, also pointed out to WIPO that not all TK has economic value and that the expectations of TK holders should not be falsely raised.[52]

IP Needs and Expectations #16
Awareness-raising among TK holders as to the potential commercial value of their TK and options in this regard

IP Needs and Expectations #17
Not to raise false expectations among TK holders

IP NEEDS AND EXPECTATIONS #18
Consideration of possible solutions in respect of TK in the public domain

Enforcement: It has already been noted (see under "Use of the IP system" above) that several persons referred to the fact that conventional IP rights (such as in musical works, computer software and sound recordings) seem sometimes difficult to enforce in their countries, and questioned therefore whether any IP rights in "new " subject matter such as TK would fare any better. A form of protection for TK that is enforceable is key. Possible regional or sub-regional approaches were suggested, and it was suggested that the OAU and of the Southern African Development Community (SADC) may have a role in this regard. See also IP Needs and Expectation # 7 above.

TK in the public domain: There are also concerns as to the fate of tradition-based creations and innovations that are already in the public domain, have already been exploited by outsiders and become subject to IP rights in the hands of outsiders. Some persons expressed a need for TK protection to be retrospective.

Institutional measures: A clear need was perceived for central institutional structures to regulate access to and use of TK and to manage rights vesting in TK. In regard to expressions of folklore the relevant Government authorities in Tanzania advised that the new draft Copyright Bill makes provision for the National Arts Council if Tanzania to act as the "competent authority" in respect of granting authorizations for the utilization of expressions of folklore, as proposed in the UNESCO/WIPO Model Provisions.[53] Finally, some persons also made the point that communities do not need to protect their TK from outsiders only, but also at times from members of their own communities.[54]

SUMMARY OF INTELLECTUAL PROPERTY NEEDS AND EXPECTATIONS

1. Clear definition or description of what is meant by "traditional knowledge" in the IP context
2. Identification and communication of role of IP in the protection of TK
3. Facilitation of dialogue and contact between TK holders, the private sector, Governments, NGOs and other stakeholders
4. Information on the economic valuation of TK for purposes of IP benefits
5. Information and advice on the IP implications of documentation
6. Legal technical assistance with documentation projects
7. TK must be enforceable by TK holders, working with their support organizations, their communities and Governments, in a combined effort
8. Information and training on options for TK protection under the existing IP system
9. Practical testing of options for protection of TK by the IP system
10. Study of relationship between customary regimes and laws protecting TK and the IP system
11. Provision of IP information, assistance and advice to Governmental authorities in respect of regional, sub-regional and national initiatives to protect TK
12. Use of 1982 Model Provisions on expressions of folklore as a basis for elaboration of norms and standards for TK protection
13. Enhanced participation by national IP offices, and the IP community at large, in processes concerning the development of biodiversity-related, environmental and conservancy policies and laws
14. Assistance and training for TK holders in the negotiation, drafting, implementation and enforcement of contracts
15. Development and testing of "best contractual practices" and guidelines and model clauses for TK contracts
16. Awareness raising among TK holders as to the potential value of their TK and options in this regard
17. Managing the expectations of TK holders
18. Considering possible solutions in respect of TK already in the public domain

BEST COPY AVAILABLE

Notes

[1] Meeting with representatives of the National Theatre and Cultural Center, including Messrs. Fred Waswa, Jackson Ndawula and Dr. Albert Ssempeke, Kampala, Uganda, September 4, 1998; Meeting at the Ministry of Industry and Commerce, Tanzania, with Mr. Mtetewaunga, Acting Registrar of Patents and Trade Marks, Mrs. Kishebuka, Principal Assistant Registrar, Mr. Challi, Secretary General of the National Arts Council, Dr. Kayombo, the Director General of the National Museums of Tanzania, and Mr. Masembei of the Ministry of Education and Culture, Dar-es-Salaam, Tanzania, September 8, 1998.

[2] Meeting with representatives of the National Theatre and Cultural Center, Uganda, including Messrs. Fred Waswa, Jackson Ndawula and Dr. Albert Ssempeke, Kampala, Uganda, September 4, 1998.

[3] Meeting with several former and current writers, dancers and singers, including Professor Servanda Moses, Mr. Joseph Warugembe and Mr. Steven Rwangyezi, the founder and Director of the Ndere Dance Troupe and a member of the Board of Trustees of the National Theatre and Cultural Center, Uganda, National Theatre and Cultural Centre, Kampala, Uganda, September 6, 1998.

[4] Meeting with Mr. Petrus Vaalbooi, Chairperson of the Southern Kalahari San Association, Upington, South Africa, September 19, 1998.

[5] Roundtable hosted by the Working Group of Indigenous Minorities in Southern Africa (WIMSA), Windhoek, Namibia, September 14, 1998.

[6] Meeting at the Ministry of Industry and Commerce, Tanzania, with Mr. Mtetewaunga, Acting Registrar of Patents and Trade Marks, Mrs. Kishebuka, Principal Assistant Registrar, Mr. Challi, Secretary General of the National Arts Council, Dr. Kayombo, the Director General of the National Museums of Tanzania, and Mr. Masembei of the Ministry of Education and Culture, Dar-es-Salaam, Tanzania, September 8, 1998.

[7] Meeting with Ugandan Herbalist and Cultural Association, Kampala, Uganda, September 6, 1998.

[8] Meeting with Professor Rogasian Mahunnah, Director of the Institute of Traditional Medicine at the Muhimbili University College of Health Sciences, University of Dar-Es-Salaam, September 9, 1998.

[9] Roundtable hosted by the Working Group of Indigenous Minorities in Southern Africa (WIMSA), Windhoek, Namibia, September 14, 1998.

[10] Visit to Mpigi Health Project, Kabasanda, Uganda, September 6, 1998.

[11] Meeting with Dr. Rutiba, Department of Religious Studies, Makerere University, Kampala, Uganda, September 4, 1998; Meeting at the Mpigi Health Project, Kabasanda, Uganda, September 6, 1998; Roundtable hosted by the Working Group of Indigenous Minorities in Southern Africa (WIMSA), Windhoek, Namibia, September 14, 1998.

[12] Meeting with Medical Research Council's Research Group for Traditional Medicine, University of Cape Town, Cape Town, South Africa, September 18, 1998.

[13] Meeting with Dr. Rutiba, Department of Religious Studies, Makerere University, Kampala, Uganda, September 4, 1998; Meeting at the Ministry of Industry and Commerce, with Mr. Mtetewaunga, Acting Registrar of Patents and Trade Marks, Mrs. Kishebuka, Principal Assistant Registrar, Mr. Challi, Secretary General of the National Arts Council, Dr. Kayombo, the Director General of the National Museums of Tanzania, and Mr. Masembei of the Ministry of Education and Culture, Dar-es-Salaam, Tanzania, September 8, 1998; Meeting with Professor Rogasian Mahunnah, Director of the Institute of Traditional Medicine at the Muhimbili University College of Health Sciences, University of Dar-Es-Salaam, September 9, 1998; Meeting with the National Biodiversity Task Force of the Directorate of Environment Affair:, Ministry of Environment and Tourism, September 14, 1998.

[14] Meeting at the Ministry of Industry and Commerce, Tanzania, with Mr. Mtetewaunga, Acting Registrar of Patents and Trade Marks, Mrs. Kishebuka, Principal Assistant Registrar, Mr. Challi, Secretary General of the National Arts Council, Dr. Kayombo, the Director General of the National Museums of Tanzania, and Mr. Masembei of the Ministry of Education and Culture, Dar-es-Salaam, Tanzania, September 8, 1998; Meeting with Ugandan Herbalist and Cultural Association, Kampala, Uganda, September 6, 1998.

[15] Roundtable hosted by the Working Group of Indigenous Minorities in Southern Africa (WIMSA), Windhoek, Namibia, September 14, 1998.

[16] Meeting with Dr. Oryem-Origa and Mr. John Tabuti, Department of Botany, Makerere University, Kampala, Uganda, September 7, 1998.

[17] Meeting with Medical Research Council's Research Group for Traditional Medicine, University of Cape Town, Cape Town, South Africa, September 18, 1998.

[18] Meeting at the Ministry of Industry and Commerce, Tanzania, with Mr. Mtetewaunga, Acting Registrar of Patents and Trade Marks, Mrs. Kishebuka, Principal Assistant Registrar, Mr. Challi, Secretary General of the National Arts Council, Dr. Kayombo, the Director General of the National Museums of Tanzania, and Mr. Masembei of the Ministry of Education and Culture, Dar-es-Salaam, Tanzania, September 8, 1998.

[19] Roundtable hosted by the Registrar of Patents, Trade Marks, Designs and Copyright, Ministry of Trade and Industry, Pretoria, South Africa, September 17, 1998.

[20] The Least-Developed Countries visited have to comply with the TRIPS Agreement by January 1, 2006.

[21] Meeting with Dr. Christopher Kizza Makumbi, Ethnomusicologist, Institute of Teacher Education, Makerere University, Kampala, Uganda, September 5, 1998.

[22] For example, meeting with Mr. Steven Rwangyezi, the founder and Director of the Ndere Dance Troupe and a member of the Board of Trustees of the National Theatre and Cultural Center, National Theatre and Cultural Centre, Kampala, Uganda, September 7, 1998.

[23] Meeting with members of "Traditional and Modern Health Practitioners Together Against Aids" (THETA), Kampala, Uganda, September 5, 1998; Meeting with Mr. Babuuzibwa Mukasa Luutu, Kampala, Uganda, September 5, 1998; Roundtable hosted by the Working Group of Indigenous Minorities in Southern Africa (WIMSA), Windhoek, Namibia, September 14, 1998; Meeting with Dr. Linda Gillfillan, Program Coordinator of the Indigenous Knowledge Systems Program, Ms. Rachel Wynberg of Biowatch

South Africa, Ms. Mapula Masemola of the State Law Advisor's Office, and, Ms. Rosemary Wolson, Intellectual Property Manager, University of Cape Town, Cape Town, South Africa, September 17, 1998.

[24] Meeting with Dr. Rutiba, Department of Religious Studies, Makerere University, Kampala, Uganda, September 4, 1998; Meeting with members of "Traditional and Modern Health Practitioners Together Against Aids" (THETA), Kampala, Uganda, September 5, 1998; Meetings with Mr. Peter Toima, the Executive Secretary of the Maa Pastoralist Development Organization and Ms. Anna Gabba of Canadian Universities Services Overseas (CUSO), Arusha, Tanzania, September 10, 1998, Roundtable hosted by the Registrar of Patents, Trade Marks, Designs and Copyright, Ministry of Trade and Industry, Pretoria, South Africa, September 17, 1998.

[25] Meeting with representatives of the National Theatre and Cultural Center, Uganda, including Messrs. Fred Waswa, Jackson Ndawula and Dr. Albert Ssempeke, Kampala, Uganda, September 4, 1998; Meeting with several former and current writers, dancers and singers, including Professor Servanda Moses, Mr. Joseph Warugembe and Mr. Steven Rwangyezi, the founder and Director of the Ndere Dance Troupe and a member of the Board of Trustees of the National Theatre and Cultural Center, National Theatre and Cultural Centre, Kampala, Uganda, September 6, 1998.

[26] Roundtable hosted by the Registrar of Patents, Trade Marks, Designs and Copyright, Ministry of Trade and Industry, Pretoria, South Africa, September 17, 1998.

[27] Meeting at the Mpigi Health Project, Kabasanda, Uganda, September 6, 1998; Roundtable hosted by the Registrar of Patents, Trade Marks, Designs and Copyright, Ministry of Trade and Industry, Pretoria, South Africa, September 17, 1998.

[28] Meeting with Dr. Christopher Kizza Makumbi, Ethnomusicologist, Institute of Teacher Education, Makerere University, Kampala, Uganda, September 5, 1998.

[29] Meeting with representatives of the National Theatre and Cultural Center, Uganda, including Messrs. Fred Waswa, Jackson Ndawula and Dr. Albert Ssempeke, Kampala, Uganda, September 4, 1998.

[30] Meeting with the National Biodiversity Task Force of the Directorate of Environment Affairs, Ministry of Environment and Tourism, Windhoek, Namibia, September 14, 1998.

[31] Meeting with Mr. Babuuzibwa Mukasa Luutu, Kampala, Uganda, September 5, 1998.

[32] Roundtable hosted by the Working Group of Indigenous Minorities in Southern Africa (WIMSA), Windhoek, Namibia, September 14, 1998.

[33] National Workshop on Indigenous Knowledge Systems, Mafikeng, September 21-23, 1998.

[34] During the mission, WIPO received from the Office of the Registrar of Patents and Trade Marks, Minister of Industry and Commerce, Tanzania, a copy of a new draft Copyright Bill, which contained a part on "The Protection of Expressions of Folklore Against Illicit Exploitation", the provisions of which are derived from the Model Provisions.

[35] Uganda: Meeting with Professor B. H. Ogwang, Natural Resource Management Specialist (Biodiversity and Range Ecology), National Environment Management Authority, September 7, 1998. Tanzania: Meeting with Professor Rogasian Mahunnah, Director of the Institute of Traditional Medicine at the Muhimbili University College of Health Sciences, University of Dar-Es-Salaam, September 9, 1998. Namibia: Meeting with the National Biodiversity Task Force of the Directorate of Environment Affairs, Ministry of Environment and Tourism, September 14, 1998. South Africa: Roundtable with representatives of the office the Registrar of Patents, Trade Marks, Designs and Copyright, and attended by representatives of various Government Departments and Agencies, September 17, 1998. See also Mahunnah, R.L.A. and Mshigeni, K.E., "Tanzania's Policy on Biodiversity Prospecting and Drug Discovery programs", *Journal of Ethnopharmacology* 51 (1996) pp. 221-228.

[36] Meeting with the National Biodiversity Task Force of the Directorate of Environment Affairs, Ministry of Environment and Tourism, Windhoek, Namibia, September 14, 1998; Meeting with Dr. Linda Gillfillan, Program Coordinator of the Indigenous Knowledge Systems Program, Ms. Rachel Wynberg of Biowatch South Africa, Ms. Mapula Masemola of the State Law Advisor's Office, and, Ms. Rosemary Wolson, Intellectual Property Manager, University of Cape Town, Cape Town, South Africa, September 17, 1998.

[37] Such as South Africa's White Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity (Government Gazette, No. 18163, July 28, 1997). The White Paper refers to the protection of TK, inter alia on pages 76-77.

[38] Roundtable hosted by the Working Group of Indigenous Minorities in Southern Africa (WIMSA), Windhoek, Namibia, September 14, 1998.

[39] Meeting at the Mpigi Health Project, Kabasanda, Uganda, September 6, 1998; Meeting with Ugandan Herbalist and Cultural Association, Kampala, Uganda, September 6, 1998; Meeting with Dr. Oryem-Origa and Mr. John Tabuti, Department of Botany, Makerere University, Kampala, Uganda, September 7, 1998; Meeting with Professor Rogasian Mahunnah, Director of the Institute of Traditional Medicine at the Muhimbili University College of Health Sciences, University of Dar-Es-Salaam, September 9, 1998; Meetings with Mr. Peter Toima, the Executive Secretary of the Maa Pastoralist Development Organization; Mrs. Anna Gabba of Canadian Universities Services Overseas (CUSO); Messrs. Greg Cameron and Edwin Karea of Pastoralist Indigenous NGO's (PINGO's), all in Arusha, Tanzania, September 10, 1998. Meeting with elders and members of Maasai village, Narrokkawo, Simanjiro District, Tanzania, September 11, 1998.

[40] Meeting at the Mpigi Health Project, Kabasanda, Uganda, September 6, 1998.

[41] Meeting with Dr. Oryem-Origa and Mr. John Tabuti, Department of Botany, Makerere University, Kampala, Uganda, September 7, 1998; Meeting with Professor Rogasian Mahunnah, Director of the Institute of Traditional Medicine at the Muhimbili University College of Health Sciences, University of Dar-Es-Salaam, September 9, 1998; Meetings with Mr. Peter Toima, the Executive Secretary of the Maa Pastoralist Development Organization; Mrs. Anna Gabba of Canadian Universities Services Overseas (CUSO); Messrs. Greg Cameron and Edwin Karea of Pastoralist Indigenous NGO's (PINGO's), all in Arusha, Tanzania, September 10, 1998; Roundtable hosted by the Working Group of Indigenous Minorities in Southern Africa (WIMSA), Windhoek, Namibia, September 14, 1998; Roundtable hosted by the Registrar of Patents, Trade Marks, Designs and Copyright, Ministry of Trade and Industry, Pretoria, South Africa, September 17. 1998.

[42] Roundtable hosted by the Registrar of Patents, Trade Marks, Designs and Copyright, Ministry of Trade and Industry, Pretoria, South Africa, September 17, 1998.

[43] Indigenous Peoples of Africa Co-ordinating Committee (IPACC), "Report on IPACC Co-ordinator visit to Tanzania and Kenya, June 6 to 19, 1998", document provided to WIPO by IPACC representative during mission: ". . . there is a correlation between displacement from the land and rapid language death due to alienation from traditional technology, food and resources." (page 8).

[44] For example, meeting with Mr. Steven Rwangyezi, the founder and Director of the Ndere Dance Troupe and a member of the Board of Trustees of the National Theatre and Cultural Center, Uganda, September 7, 1998.

[45] "Cultural Policy (Policy Statements)", Ministry of Education and Culture, Tanzania, 1997, page 9.

[46] "A Draft Policy on Arts and Culture in Namibia", Forum on Arts and Culture, Ministry of Basic Education and Culture, February, 1998.

[47] Draft "Policies, Strategies and Priorities for the Sector of Culture, Information and Sport", SADC, May, 1998.

[48] Roundtable hosted by the Working Group of Indigenous Minorities in Southern Africa (WIMSA), Windhoek, Namibia, September 14, 1998, Meeting with San couple, at home of Mr. Raymond Martin, Gobabis, Namibia, September 15, 1998.

[49] Meeting with Professor Rogasian Mahunnah, Director of the Institute of Traditional Medicine at the Muhimbili University College of Health Sciences, University of Dar-Es-Salaam, Dar-Es-Salaam, Tanzania, September 9, 1998; Meetings with Mr. Peter Toima, the Executive Secretary of the Maa Pastoralist Development Organization; Mrs. Anna Gabba of Canadian Universities Services Overseas (CUSO); Messrs. Greg Cameron and Edwin Karea of Pastoralist Indigenous NGO's (PINGO's), all in Arusha, Tanzania, September 10, 1998; Meeting with elders and members of Maasai village, Narrokkawo, Simanjiro District, Tanzania, September 11, 1998; Meeting with Mr. Paolo Thataone, Governor, Omaheke Region, Gobabis, Namibia, September 15, 1998; Roundtable hosted by the Working Group of Indigenous Minorities in Southern Africa (WIMSA), Windhoek, Namibia, September 14, 1998; Meeting with San couple, at home of Mr. Raymond Martin, Gobabis, Namibia, September 15, 1998.

[50] Meetings with Mr. Peter Toima, the Executive Secretary of the Maa Pastoralist Development Organization; Mrs. Anna Gabba of Canadian Universities Services Overseas (CUSO); Messrs. Greg Cameron and Edwin Karea of Pastoralist Indigenous NGO's (PINGO's), all in Arusha, Tanzania, September 10, 1998. Meeting with elders and members of Maasai village, Narrokkawo, Simanjiro District, Tanzania, September 11, 1998.

[51] Roundtable hosted by the Registrar of Patents, Trade Marks, Designs and Copyright, Ministry of Trade and Industry, Pretoria, South Africa, September 17, 1998.

[52] Meeting with Mr. Paolo Thataone, Governor, Omaheke Region, Gobabis, Namibia, September 15, 1998, Meeting with Medical Research Council's Research Group for Traditional Medicine, University of Cape Town, Cape Town, South Africa, September 18, 1998.

[53] Meeting at the Ministry of Industry and Commerce, with Mr. Mtetewaunga, Acting Registrar of Patents and Trade Marks, Mrs. Kishebuka, Principal Assistant Registrar, Mr. Challi, Secretary General of the National Arts Council, Dr. Kayombo, the Director General of the National Museums of Tanzania, and Mr. Masembei of the Ministry of Education and Culture, September 8, 1998.

[54] Roundtable hosted by the Working Group of Indigenous Minorities in Southern Africa (WIMSA), Windhoek, Namibia, September 14, 1998.

FFM to South Asia

Box 1. South Asia FFM: Country Membership in international IP treaties

International IP treaties	Bangladesh	India	Sri Lanka
Paris Convention	1991	1998	1952
Berne Convention	1999	1928	1959
Rome Convention	-	-	-
Madrid Agreement	-	-	-
The Hague Agreement	-	-	-
PCT	-	1998	1982
UPOV Convention	-	-	-
TRIPS Agreement	1995	1995	1995

Box 2. South Asia FFM: Country Membership in TK-related treaties and processes

TK-related treaty/process	Bangladesh	India	Sri Lanka
UNESCO Heritage Conv.	1997	1977	1981[A]
UNESCO Cul. Property	1983	1977[A]	1980[A]
ILO 169	-	-	-
IUPGR – FAO	Yes	Yes	Yes
CBD	1994	1994	1994
UNCCD	1996	1996	1998[A]

The FFM to South Asia took place from September 28 to October 14, 1998. The mission visited the following countries during this period: Peoples' Republic of Bangladesh, Republic of India, and the Democratic Socialist Republic of Sri Lanka. The Interim Mission Report, which contains information as to the persons and entities with whom WIPO consulted, is set out in Annex 4.

The presentation of findings in this section is organized under the following headings: Objectives of IP Protection, Documentation, and Means of Protecting TK (patents, industrial designs, copyright and related rights).

Objectives of IP Protection

The persons who the mission met with recommended that certain policy objectives should be related to the promotion of innovation and creativity when considering the IP protection of TK. According to their statements, protection of TK should additionally serve as an incentive measure for:

- protection of TK from knowledge erosion and disappearance of traditions, i.e. the conservation of TK. IP protection for TK should therefore offer transmission incentives for TK holders;
- the promotion of TK and informal innovations as a strategy for sustainable development;
- protection of TK from unauthorized commercialization and use with gainful intent, i.e. protection of commercial interests of TK holders;
- protection from distortion and other prejudicial actions, i.e. protecting the integrity/purity of expressions of folklore and underlying traditions;
- protection of human and moral rights of TK-holders (while bearing in mind that human rights, as widely conceived, make certain assumptions, such as individualism, which are culturally specific);
- management of cross-cultural knowledge transactions between traditional and modern knowledge systems, which take into account the relativity of such concepts as novelty and inventive step;
- protection of TK for biodiversity conservation, since conservation of biodiversity is related to conservation of traditional knowledge systems. The conservation of cultural diversity is thus considered as a precondition for conservation of biological diversity[1];
- utilization of the existing IP systems within the development of legal and institutional frameworks for access and benefit-sharing in genetic resources ("ABS");

IP NEEDS AND EXPECTATIONS # 1
Making IPRs mutually supportive with specific TK related policy objectives, such as biodiversity and TK conservation, equitable benefit sharing, etc.

IP NEEDS AND EXPECTATIONS # 2
Effective management of IPRs during TK documentation, to reduce reluctance of TK holders to transmit TK.

The need to discuss whether IP protection for TK was feasible and desirable in the first place, depending on whether IPRs could be made mutually supportive with the above-mentioned policy objectives was emphasized by local counterparts on the FFM.[2] As a guiding principle for future consultations and consensus building on IP and TK, they emphasized the need to recognize and respect the divergences between different cultural understandings of IPRs. Besides considering inter-cultural differences, they emphasized the need to consider possible social effects of introducing IP protection for TK, for example, how it would affect the social transmission of knowledge. As one expert pointed out, *"[t]his could affect how traditional healers speak to each other, their children, how they transmit their knowledge and teach their students."*[3]

Documentation

Most stakeholders stated a need for TK documentation in relation to a wide range of policy objectives, including the promotion of innovation and creativity, the prevention of loss of traditional knowledge, the conservation of biological diversity, the equitable sharing of benefits arising from its use, the safeguarding of national culture and identity, people-to-people learning for sustainable resource management and development strategies, and other objectives. Most participants considered documentation to be essential for all these objectives, but emphasized that the increasing reluctance of certain TK holders to divulge their knowledge and their opposition to documentation of TK is due to inappropriate management of IPRs during the documentation process. A number of participants therefore requested IP advice and training on effective management of IPRs during their ongoing documentation initiatives.

The practical IP implications of ongoing documentation differ widely, depending on these policy objectives and contexts. The concrete IP implications of TK documentation are illustrated in this section by three practical examples: the Peoples' Biodiversity Registers (coordinated by Indian Institute of Science, Bangalore,

BEST COPY AVAILABLE

India); the Medicinal Plants Conservation Project (operated by the Ministry of Health and Indigenous Medicine, Colombo, Sri Lanka); and the Honey Bee Network (coordinated by SRISTI, Ahmedabad, India).

The **Peoples' Biodiversity Register (PBR) Program** is a nation-wide initiative for documenting knowledge of local people about biodiversity at village (*panchayat*) level, which is undertaken as part of a country-wide exercise of 'Community Registers'. The program seeks to establish a nation-wide *"bottom-up system for recording information on biological diversity ... which should serve as a source of documentation relevant to intellectual property rights issues"*.[4] The objectives of the PBR initiative are listed in the Text Box, 'Objectives of the PBR Program'.[5] The PBRs *"would help in establishing the claim of communities on the commercial use of their practical ecological knowledge and therefore stake their claim to a share of the benefits as and when such a system [of ABS] is established"*.[6]

OBJECTIVES OF THE PBR PROGRAMME

- local management of bioresources;
- formulation of strategies of sustainable extraction;
- monitoring of outflows of bioresources;
- equitable sharing of benefits arising from the use of local bioresources.

Distinct from other documentation initiatives, the PBR Program does not visualize any direct sharing of royalties from commercial use of TK by directly granting IPRs to TK holders over their knowledge and innovations.[7] The relevant Report points out that *"The practical reason for rejecting the proposal to link royalties with community level maintenance of a cultivar, or knowledge of medicinal properties is that it is well neigh impossible to pinpoint recipients of the royalty in the absence of specific material or information transfer agreements. [...] The system we suggest instead involves payment of a straightforward cess by biodiversity-based enterprises, and its disbursement through grants and awards in a transparent fashion"*.[8]

The objective of TK documentation in the PBR context is to allow for a transparent distribution of royalties to TK-holders from a National Biodiversity Fund. In this model, the role of IPRs is more important in the *collection* of royalties for the National Biodiversity Fund, whereas the role of TK documentation is relevant to the *allocation* of the funds to TK holders. The Report suggests that for the collection of funds *"the most effective source of information on the use of genetic resources is the intellectual property rights applications [i.e. patent applications]"*.[9] The Report therefore recommends the development of *"model IPR legislation that would make it mandatory that all [patent] applications pertaining to living organisms and their products must specify the biological source, the country/ies of origin ... and all relevant public domain and community based knowledge"*.[10]

The second TK documentation initiative on which FFM counterparts provided detailed information was the **'Sri Lanka Conservation of Medicinal Plants Project'** (the Project) executed by the Government of Sri Lanka with support from the World Bank. The objective of the project is the conservation and sustainable use of medicinal plants in Sri Lanka.

The Project has identified a need to develop contractual agreements and Guidelines for regulating IP-aspects of access to medicinal plants and related TMK. The Project addressed this need in two steps: first, a model agreement between the Government of Sri Lanka and persons participating in the Project was developed. This Agreement is to be signed by all institutions, individuals, or other legal entities involved in the Project. The second step in covering IP aspects of access and benefit-sharing is to develop National Guidelines for ABS.[11]

IP NEEDS AND EXPECTATIONS # 3
Inclusion of TK documentation in patent applications to indicate (a) the source country of TK and related genetic resources, and (b) as proof that the resources were obtained legally, including PIC.

IP NEEDS AND EXPECTATIONS # 4
Development of TK documentation standards which fulfill minimum documentation requirements for the acquisition of certain IPRs (patents, industrial designs, etc)

FFM participants indicated that one of the main difficulties was that patents were being granted for TK-based inventions ("TK patents") without the inclusion of necessary TK documentation in the examination procedures for the patent applications. They therefore recommended that the national IP offices should develop standardized procedures by which they can integrate TK documentation into their ongoing procedures for grant, examination, filing, publication and registration of IPR titles, in particular of patents.

The third documentation effort about which extensive information was received is the **Honey Bee Network and Newsletter**, which are operated by the Society for Research and Initiatives for Sustainable Technologies and Institutions (SRISTI). The key objectives of SRISTI are listed in the Text Box 'Objectives of SRISTI'. The strategy employed to pursue the objective of rewarding grassroots creativity is to link informal innovations with investment and entrepreneurship.

The Honey Bee Network of SRISTI *"aims to …identify, recognize, respect and reward innovative individuals or groups who, through their own efforts, have evolved sustainable answers to issues of development, particularly natural resource management"*.[12]

Documentation of informal innovations plays a central part in this endeavor:

"We are trying to stem knowledge erosion, a threat sometimes as serious, if not more, as resource erosion through documentation. ... documentation of people's knowledge systems have been pursued by following the principles: (i) whatever is learnt from people must be shared with them in their language, and (ii) all practices or innovations must be identified by the names and addresses of the individuals or communities who generated them so that the innovations are recognized as the intellectual property of the innovators".[13]

OBJECTIVES OF SRISTI IN OPERATING THE HONEY BEE NETWORK

- to pursue protection of intellectual property rights of grassroots innovators …. and policy and institutional changes at national and global levels;
- to document, analyze and disseminate the innovations developed by people themselves to create greater space in polity for building upon …innovations from below;
- to support people to people learning through networking among innovators;
- to undertake action research to generate incentive models for recognizing, respecting and rewarding grassroots creativity;
- to validate and add value to local innovations through experiments … and laboratory research;
- to embed the insights learned from grassroots innovations in formal education systems in order to expand the conceptual and cognitive space available to these innovations.

Following these principles, SRISTI has collected about 5300 informal innovations from 2300 villages within India and the Honey Bee Newsletter extends the network to 75 countries.[14] Based on these practical experiences, SRISTI identified two primary intellectual property issues which have arisen as a result of such documentation:

- The publication of a practice can preempt intellectual property rights of an innovator by bringing the innovation into the public domain. At the same time, the goal of networking innovators cannot wait till characterization of innovation is done in a manner that the intellectual property can be protected. This dilemma is being resolved through dissemination of a practice in a synoptic form, while at the same time undertaking research … for purposes of potential commercialization with or without IPR protection.

- Another proposal that is being considered in order to overcome the problem of publication-linked destruction of novelty, is to set up a national/international registry of innovations. Publication in this registry would entitle the innovator to some kind of patent protection [see 'Patents' below]. Each innovation may receive a unique registration number as already attempted by Honey Bee.[15]

Participants situated the documentation of TK at the nexus between **formal and informal IP regimes**.[16] Secrecy is the primary regime by which TK holders who do not have access to formal IP protection maintain control over their innovations. Documentation breaks the barriers of secrecy and the effectiveness of such regimes. Concerns were expressed in favor of TK documentation initiatives taking secrecy regimes into account in the data collection stages. At the same time, participants called for the documentation of informal regimes themselves, as a necessary first step for the recognition of such regimes and customary law.

In order to manage the IP implications of TK documentation participants made several concrete suggestions:

- The first one was to develop standards for TK documentation which are compatible with the formal requirements of the first phase of examination of patent applications (formal phase). Standards should also be compatible with documentation-standards developed for biological resources associated with TK. The standards should sufficiently identify the individual or collective holders of TK so that IPRs would be obtainable by these holders if the TK fulfills the relevant criteria for protection.
- A second suggestion was to develop strategies regarding destruction of novelty through documentation, especially through disclosure of patentable inventions. Strategies mentioned by some groups included: (i) systematic intentional disclosure; (ii) a phased approach to documentation; (iii) synoptic presentation of documented TK; (iv) a registration system which would grant petty patent-like protection for the documented innovation until the TK holder can file an application for a utility patent. For information on 'petty patents' and 'utility patents' see the chapter on the 'The Intellectual Property System' above.

IP NEEDS AND EXPECTATIONS # 5

The development of IP-focused documentation procedures, such as phased or synoptic documentation, systematic disclosure, etc.

IP NEEDS AND EXPECTATIONS # 6

Integrating TK gazettes, databases and registries into existing IP information systems for the search of non-patent prior art.

IP NEEDS AND EXPECTATIONS # 7

Reduction of costs of acquisition, exercise and enforcement of patent rights.

Parties with whom the mission met also suggested ways to use documentation data within existing IPR systems at the national and international levels. These suggestions included:

- Using documentation data for inclusion in patent applications of an indication of country/ies of origin of TK and associated biological resources covered by the claims of the application;
- Integrating TK documentation into existing IP information systems in order to include TK subject matter in prior art searches during the examination of patent applications for TK-based inventions. Additionally, the inclusion of TK documentation in the PCT minimum documentation list and in the *Journal of Patent Associated Literature* and the creation of classes or sub-classes for TK in the International Patent Classification (IPC) was also proposed.
- Using documentation data to identify the source communities and individuals for purposes of PIC procedures.

Counterparts of the FFM also called for recognition in TK documentation of customary IP regimes that apply to the TK. Informal regimes, especially secrecy regimes, should be respected during the documentation process.

Finally, participants requested that WIPO should clarify the IP protection of data and compilations produced by TK documentation. They suggested developing model provisions for contracts between agencies undertaking TK documentation and TK holders participating in such projects. They also suggested development of national, IP-related guidelines for ABS.

Means of Protecting TK

Patents

FFM counterparts expressed a wide range of views and needs in relation to the patent system, reflecting diverse points of view and ongoing experimentation of TK holders with the patent system. Their statements included propositions to use the existing patent system for TK protection; to develop *sui generis* protection for TK, modeled upon, but distinct from, the patent system; to exclude certain TK systems from patentable subject matter; and the assessment of the patent system as a system which is entirely inadequate for TK protection. A common assessment among these diverging views was, however, that the interactions between TK systems and the patent system are growing. Participants noted that these interactions encompass two developments: first, there is an increasing number of patents filed and granted over TK-based inventions ("TK patents"). Hence the informal innovations of TK systems enter the ambit of IPR policy as a possible new area of protectable subject matter. Secondly, TK holders and policy makers are developing new uses for the patent system as a tool within TK-related frameworks, such as access and benefit-sharing frameworks, development and environmental conservation strategies, etc. Both these developments were addressed in the discussions.

Availability of patent protection for TK holders

The IP needs expressed by the stakeholders regarding availability of patent protection for informal innovators were concentrated on acquisition and exercise of rights, and on the disclosure of patentable inventions during TK documentation.

The publication of documented TK is a high priority for most TK documentation initiatives which are directed towards disseminating sustainable development - and resource management - strategies among local communities and developing countries.[17] Depending on participants' views regarding the grant of exclusive rights over TK, they either seek to systematically utilize, or to strategically circumvent the disclosure of their innovations, because such disclosure destroys the novelty of the innovation and makes it impossible for the invention to qualify for patent protection anywhere in the world.

TK holders who seek to prevent the grant of any patents over their inventions have adopted the *systematic disclosure of documented TK* as a strategy to make it part of recognized prior art. For example, some initiatives are systematically disclosing the innovations compiled in their TK-databases in order to prevent possible future patents based on the innovations.[18]

On the other hand, TK holders who seek to obtain patents for informal innovations and TK-based inventions have developed documentation strategies which *prevent* disclosure in a sufficiently clear and complete manner. Thus, they adopted certain strategies which are intended *not* to disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art:
SRISTI has adopted a three-pronged strategy: dissemination of practices in a synoptic form; concurrent research on value addition; initiation of a system of registration of local innovations which will prevent third parties from seeking to derive benefits from registered innovations without some form of licensing.[19]

Apart from these strategies, they also considered "defensive patenting" as a possible strategy.[20] Concretely, they proposed two modifications or additions to the existing system to resolve TK-specific problems of disclosure: first, an extended grace period should be provided for the patent applications of TK holders. This modification would adjust the definition of prior art to exclude from consideration premature disclosure in the context of documentation, if that disclosure was made within a specified period before the filing of the application. A TK holder or documentation project who made such a premature disclosure, because for example he was unaware of its IP implications, would be temporarily protected against the consequences of such disclosure. For more information on "prior art" and patent applications in general see the chapter on 'The Intellectual Property System' above.

The second suggestion which some groups made to prevent the destruction of novelty through disclosure, was a registration mechanism for informal innovations, similar to certain national petty patent systems.

INSTAR (International Network for Sustainable Technological Applications and Registration) is a model developed in 1993 to develop a global mechanism operated by WIPO or similar institution. ... The purpose is to have a low transaction cost system for registering any innovation, traditional knowledge or invention in the name of applicant community or individual or group thereof. While the invention will require inventiveness, non-obviousness, novelty and utility, etc., the screening will be done only for sufficient disclosure. Once that is found satisfactory, unique registration cum patent protection will be granted. ... In the absence of such a system, there is no incentive for disclosure of local innovations by farmers.[21]

In effect, registration, in the names of TK holders would award the registered practices a right of precedence in matters of filing of applications for protection of intellectual property and exclude others from filing patent applications on the basis of registered practices.[22]

FFM participants identified the high costs of filing patent applications as the biggest obstacle to the **acquisition of patents** by TK holders. They pointed out that *"the transaction costs of the formal system are beyond the capacity of a majority of informal innovators."*[23] In order to make the patent system for TK holders more accessible to TK holders, they proposed several possible measures to reduce transaction costs:

- they requested financial and legal assistance from WIPO to informal innovators for the filing of patent applications;
- collective filing of patent applications by informal innovators' associations on behalf of groups of informal innovators may allow TK holders to share transaction costs for acquiring and exercising patent rights;
- an extended grace period for TK holders, as mentioned above, would give informal innovators additional time to research possibilities of commercialization and to raise funds for filing fees of patent applications; and
- exploration of the collective management of industrial property rights.

Such an exploration of collective management of industrial property rights would build upon existing models from the collective management of copyright and related rights as well as on experiences of associations like SRISTI with the acquisition and management of patent rights on behalf of informal innovators. **Based on these** experiences, they developed a *"general framework depicting the flow of material, stages at which intellectual property is created, stages at which rewards to local innovators arise and the flow of such rewards"* which is presented in the Box 'Framework'.

IP NEEDS AND EXPECTATIONS # 8
An extension of the grace period for TK holders.

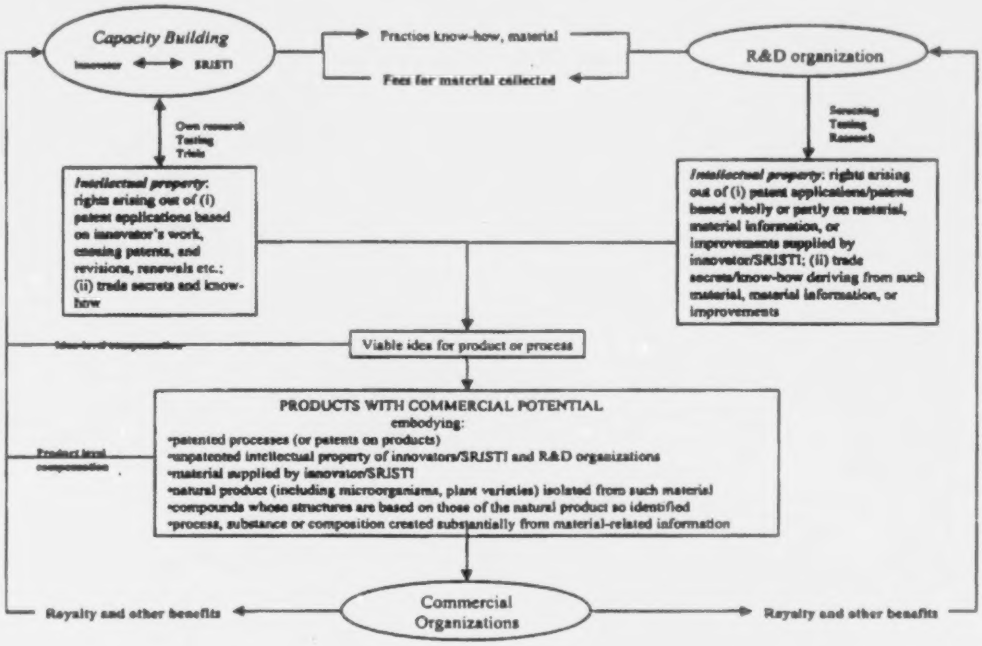
IP NEEDS AND EXPECTATIONS # 9
Creation of registries for TK-based informal innovations, which would grant petty patent-like protection.

IP NEEDS AND EXPECTATIONS # 10
Including searchable TK documentation into the prior art search procedures of patent issuing authorities as searchable non-patent prior art.

With regard to the destruction of novelty, some documentation institutions and initiatives requested that WIPO should assist them in developing strategies in relation to disclosure of informal innovations and TK-based inventions. Such strategies may seek to avoid future patenting through systematic intentional disclosure. Alternatively, they may seek to keep the option of filing patent applications open for TK holders through non-disclosure and synoptic publication of TK. Further strategies which participants suggested include defensive patenting, extension of the grace period for TK holders, and a registration system for informal innovations which would award the registered innovations the right of precedence in matters of filing patent applications.

In order to improve the acquisition and use of patent rights by TK holders, certain groups of TK holders requested that WIPO explore ways and means of reducing the *transaction costs* for TK holders in acquiring and exercising their rights. Concrete options suggested by them for exploration included: (a) specialized IP services for TK holders by WIPO and other relevant institutions, (b) collective filing of patent applications through associations of informal innovators and TK holders, (c) practical exploration of collective management of patent rights. Numerous FFM participants also suggested a review of the *concept of prior art*, specifically 'prior foreign activity', in relation to TK, (d) inclusion of Newsletters and Gazettes documenting informal innovations in the PCT minimum documentation list and in the *Journal of Patent Associated Literature*[24].

FRAMEWORK: FLOWS OF MATERIAL, KNOWLEDGE AND REWARDS


Capacity Building
Innovator
SRISTI
Practice know-how, material
Fees for material collected
R&D organization
Own research
Testing
Trials
Screening
Testing
Research
Intellectual property: rights arising out of (i) patent applications based on innovator's work, ensuing patents, and revisions, renewals etc.; (ii) trade secrets and know-how
Intellectual property: rights arising out of (i) patent applications/patents based wholly or partly on material, material information, or improvements supplied by innovator/SRISTI; (ii) trade secrets/know-how deriving from such material, material information, or improvements
Idea-level compensation
Viable idea for product or process
PRODUCTS WITH COMMERCIAL POTENTIAL
embodying:
•patented processes (or patents on products)
•unpatented intellectual property of innovators/SRISTI and R&D organizations
•material supplied by innovator/SRISTI
•natural product (including microorganisms, plant varieties) isolated from such material
•compounds whose structures are based on those of the natural product so identified
•process, substance or composition created substantially from material-related information
Product level compensation
Commercial Organizations
Royalty and other benefits
Royalty and other benefits

Patents over TK-based inventions granted to non-TK holders

In recent years public concerns have focused on patents over TK-based inventions which were obtained by non-TK holders. A number of counterparts pointed out that biopiracy has generated wide-spread concerns about the equity of the formal IP systems and the recognition of TK as prior art.[25] Consequently, some parties mentioned as their foremost IP need not the protection of TK, but longer transitional phases for the implementation of the TRIPS Agreement[26] or a suspension of implementation, because in their view the Agreement erodes, commodifies and misappropriates TK systems.[27] Other persons proposed the evolution of the patent system so that they may function equitably in respect of TK patents held by non-TK holders.

Recommendations of FFM participants to further advance the equity of the patent system included:

- exclusion of certain codified TK systems from patentable subject matter;
- inclusion in the formal requirements for patent applications, which claim TK-based inventions and biological resources, of *"proof that the [TK and] biological material has been obtained with prior informed consent of the country of origin, and acknowledgment of all relevant public domain and community based knowledge"*[28];

BEST COPY AVAILABLE

- provision of legal and financial assistance to TK holders in challenging TK-patents acquired without the prior informed consent of the TK holders;[29] and
- inclusion of PIC requirement in the formal requirements of patent applications claiming TK-based inventions or biological resources.

They suggested such requirements in order to utilize the patent system as an effective tool for the equitable sharing of benefits arising from the use of TK and associated biological resources in patented inventions.

Some counterparts referred to recent cases where TK documentation was cited after patent applications had been granted for TK-based inventions. The TK documentation which was cited negated the patentability of the alleged inventions and the patents had to be revoked because the TK prior art was not part of searchable non-patent literature.[30] The patents would not have been granted in the first place if TK documentation had been included in searchable prior art as a part of non-patent literature. Participants suggested several steps which could address the problem of including TK documentation into searchable prior art:

- inclusion of TK newsletters, gazettes, databases and registries into existing IP information systems for non-patent literature, such as the *Journal of Patent Associated Literature* (JOPAL) and WIPONet.
- inclusion of standardized TK documentation into the regular procedures of patent-issuing authorities for the filing, examination, publication, granting and registration of patent titles.
- development of standards for the international exchange of TK documentation within existing international IP information systems for the search of prior art, especially non-patent literature.
- the inclusion into the International Patent Classification of classes, subclasses, groups or subgroups for TK subject matter, so that TK-based patents can by systematically searched. Classification is indispensable for the retrieval of patent documents in the search for prior art. Such retrieval is needed by the patent-issuing authorities, potential inventors, research and development institutions, and potentially by TK holders' associations. TK-based subject matter would need to be located in the Classification in order to become practically searchable prior art.

Besides the expansion of searchable prior art, some experts explained that there are "cross cultural knowledge transactions" involved when TK subject matter is incorporated into patent information systems. In the course of these transactions two problems occur with the measure of novelty and inventiveness which should be addressed:

- a given TK-based modification may appear to be novel and non-obvious in Western knowledge systems, whereas it may be entirely obvious within the TK system.[31]
- highly novel and non-obvious innovations *within* TK systems are currently not patentable, because they do not qualify as inventions within modern knowledge systems, if they are expressed in the theory and terms of the TK system (which is the only way they can be expressed). For example, if an Ayurvedic physician developed a new formulation that is useful in 'wind disorders' according to Ayurvedic terminology, and he described his innovation in terms of the appropriate Ayuverdic diagnosis and etiolosy, the innovation could not reasonably be considered an invention within the reason of the modern patent system.[32]

IP NEEDS AND EXPECTATIONS # 11
Inclusion of TK documentation into international IP information systems for searching non patent prior art and for registering and publishing patents on TK based inventions.

IP NEEDS AND EXPECTATIONS # 12
Exclusion of certain TK subject matter from patentability, such as codified systems of traditional medicine (Ayurveda Unani, etc.).

IP NEEDS AND EXPECTATIONS # 13
Making non patent-literature databases of TK documentation accessible to patent-issuing authorities for purposes of substantive patent examination (i.e., prior art searches).

They also suggested that WIPO produce case studies on patents based on non-recognition of their TK as prior art, and that the organization also provide legal and financial assistance to TK holders in challenging patents.

BEST COPY AVAILABLE

Industrial designs

Several parties with whom the WIPO delegation met expressed a need to control the undesirable exploitation of folk designs, including by means of industrial design protection. For example, they reported that *saris* embodying traditional folk designs were being made and sold for commercial purposes both nationally and abroad without the consent of the TK holders. Reference was made to Section 4 of Part II of the TRIPS Agreement, which provides for the protection of independently created industrial designs that are new or original, and participants considered that some tradition-based designs produced by TK-holders might qualify for such protection, while some might not. For the former group of traditional designs, participants suggested three steps for an improved protection of TK-based designs under existing industrial design systems: (1) standards for the documentation of tradition-based designs should take into account the minimum documentation requirements for industrial designs under the TRIPS Agreement and the Hague Agreement Concerning the International Deposit of Industrial Designs; (2) the industrial property offices should incorporate standardized documentation of traditional designs into their search files for examination of the substantive examination of applications for industrial design titles; (3) relevant classes or subclasses for TK-based designs should be established under the Locarno Agreement Establishing an International Classification for Industrial Designs (1979).

IP NEEDS AND EXPECTATIONS # 14
Incorporation of standardized documentation of traditional designs into the substantive examination of applications for industrial design titles.

IP NEEDS AND EXPECTATIONS # 15
Establishment of classes or subclasses for TK based designs in the Locarno Agreement, 1979.

IP NEEDS AND EXPECTATIONS # 16
Improvement of the exercise of existing rights in expressions of folklore.

Copyright and related rights

Existing copyright legislation of some countries in South Asia include provisions for the protection of expressions of folklore.[33] Several parties with whom the delegation met considered it necessary to explore further possibilities for the exercise of existing rights for the protection of expressions of folklore. In some cases, the economic and moral rights granted by such legislation are administered by government institutions.[34] The mission's counterparts observed a need to examine possibilities for the improved and more effective exercise of rights granted under existing legislation. As one informant pointed out, *"[t]here are folklore provisions in the national copyright law, but the provisions are not working because there is unauthorized commercialization everywhere today. Therefore more effective administration of rights should be considered."*[35] Furthermore, some participants emphasized that the adequate protection of expressions of folklore should vest the ownership right in the communities concerned, or a national institution created specifically for exercising such rights. The same persons emphasized the need to take into account oral traditions as one form of 'expression' of folklore and to examine the fixation requirement of copyright in relation to the protection of folklore.

With respect to commercialization of expressions of folklore, participants pointed out that there is a large market for modern adaptations of expressions of folklore, particularly modern adaptations of traditional music. They evaluated this condition as both an opportunity which facilitates the conservation of folklore (markets for well-documented expressions of folklore may generate financial resources for documentation efforts) and simultaneously as a potential obstacle which makes accurate conservation more difficult (markets for adaptations may challenge the conservation of folklore in its "pure" form). This dilemma throws new light on the question of pastiche in relation to copyright and folklore conservation, and assigns the concept of the 'derivative work' a crucial role in relation to folklore.[36] The financial and other implications involved in the collection of folktales was of concern to some parties, since unauthorized reproduction of such tales has reportedly spread in recent years with a growing market for 'exotic Third World literatures'.

Several persons stressed the importance of protecting performers' rights in relation to traditional dances and music[37] and some of them anticipated, in this regard, the implementation of Article 14.1 of the TRIPS Agreement as a possible means for providing such protection. Article 14.1 provides that performers shall have the possibility of preventing the fixation of their unfixed performances and the reproduction of their fixed performances when undertaken without their authorization. Article 14.1 also provides that performers shall also have the possibility of preventing the broadcasting by wireless means and the communication to the public of their live performance when undertaken without their authorization. Some participants felt that these neighboring rights could provide a means of protecting traditional dances and music from widespread ongoing piracy once they are vested in performers through the implementation of the TRIPS Agreement. Some of them, who were working on documentation and archiving of folkloric expressions, recommended the development of licensing guides for audiovisual fixations of expressions of folklore, which are held by existing archives and research institutions. Numerous persons and groups considered the protection of folklore necessary not only to prevent illicit commercial exploitation of South Asian traditions, but also as a means of ensuring the integrity of national identity.

IP NEEDS AND EXPECTATIONS # 17
Development of licensing agreements for expressions of folklore currently held in archives and other documentation centers.

In summary, the participants in the FFM identified the following IP issues and needs related to the folklore protection through copyright and neighboring rights: (1) improvement of the exercise of rights granted under existing copyright and neighboring rights legislation for expressions of folklore; (2) examination of the fixation requirement under existing copyright legislation by taking into account oral traditions as one form of 'expression' of folklore; (3) exploration of the role of 'derivative works' in relation to folklore protection, with a focus on the question of pastiche; (4) protection of performers' rights in traditional dances and music in relation to unauthorized fixation and unauthorized reproduction of such fixations; and (5) development of licensing guides for expressions of folklore which are held in existing archives and documentation institutes.

Notes

---

[1] "A system of rewards which is based on the principle that conserving biological diversity is possible only when the associated knowledge systems are rewarded." (Chand, V. S., et.al. (1996): 1).

[2] Discussions with Dr. R. V. V. Ayyar, Secretary, Department of Culture, Ministry of Human Resource Development, New Delhi, October 10, 1998.

[3] Mr. A.V. Balashbramowan, Center for Indian Knowledge Systems, participant at the Roundtable on IPRs and Traditional Knowledge, MSSRF, Chennai, September 30, 1998

[4] Karnataka Planning Board. *Report of the Kamataka Planning Board. Subgroup on Biodiversity.* 1996: 54, 89.

[5] Chhatre, A. et. al. *Srishtigyaan. A Methodology Manual for People's Biodiversity Registers*. Bangalore: Indian Institute of Science; 1998: 2.

[6] Ibid., p.3.

[7] Karnataka Planning Board (1996): 89.

[8] Ibid., 89-90.

[9] Ibid., 38.

[10] Ibid., 92 (Recommendation 2).

[11] Members of SLCMPP told us that these guidelines are currently under development.

[12] SRISTI. *Saga of SRISTI's Search for Sustainable Solutions*. Ahmedabad: SRISTI; 1997: 3.

[13] SRISTI. *SRISTI Initiatives for Conservation through Augmenting Creativity at Grassroots*. SRISTI, 1997: 3.

[14] Gupta, Anil K. *Crops, Creativity and Compensation: Honey Bee network approach*. SRISTI, 1996: 1.

[15] SRISTI. (1997): 4.

[16] SLCMPP, Colombo, September 29, 1998; "Such [traditional] knowledge has been protected through processes akin to the modern system of trade secrets" in, Chand, V. S., et. al. "Framework for rewarding grassroots creativity and innovation." Paper prepared for Forum Belem (1996): 3.

[17] This point was emphasized by participants at the SRISTI Roundtable, Ahmedabad, October 3, 1998.

[18] For example, the M. S. Swaminathan Research Foundation (MSSRF) is systematically disclosing informal innovations compiled in its 'Farmers' Rights Information System'. Explanation offered by staff members of MSSRF, Chennai, September 30, 1998.

[19] V. J. Chand, et. al. (1996): 3.

[20] SRISTI (1998): 6: "Defensive Patents: There are communities, research agencies and individuals who do not want to profit from their innovations but they also do not want someone else to profit from it in an unauthorized manner. ... They can file a patent and then assign it to any one who agrees to use it for self use or not for profit use. It is thus a kind of defensive patenting."

SUMMARY OF INTELLECTUAL PROPERTY NEEDS AND EXPECTATIONS

1. Making IPRs mutually supportive with specific TK-related policy objectives, such as biodiversity [illegible] conservation, equitable [illegible]
2. [illegible]
3. [illegible]
4. Development [illegible] certain IPRs [illegible]
5. The development of IP-related documentation procedures, such as [illegible] systematic documentation [illegible]
6. [illegible]
7. Protection [illegible]
8. An extension of the [illegible] TK [illegible]
9. Creation of [illegible]
10. Including searchable TK documentation into the [illegible] searchable non-patent prior art.
11. Inclusion of TK documentation into international IP information systems for searching non-patent prior art and for registering and publishing patents on TK-based inventions.
12. [illegible]
13. Making non-patent literature databases of TK documentation accessible to patent [illegible] for the purposes of substantive patent examination (i.e., prior art searches).
14. Incorporation of standardized documentation of traditional designs into the substantive examination of applications for industrial design titles.
15. Establishment of classes or subclasses for TK-based designs in the Locarno Agreement (LOC).
16. Improvement of the exercise of existing rights in expressions of folklore.
17. Development of licensing agreements for expressions of folklore currently held in archives and other documentation centers.

BEST COPY AVAILABLE

[21] SRISTI. (1998): 7.

[22] V. J. Chand, et. al. (1996): 4, 7, 8.

[23] SRISTI. (1998): 2.

[24] The JOPAL is published by WIPO and can be viewed online at <http://jopal.wipo.int/>

[25] References were made to patent nos. US 436, 257 B1, US 5,411,736 and US 5,409,708 on Neem-based fungicides; patent no. 5,401,504 on turmeric; and no.5,663,484 on basmati rice.

[26] Articles 65 and 66 of the TRIPS Agreement provide for transitional arrangements for the implementation of the Agreement by developing countries and least-developed countries.

[27] "You asked us about our needs in relation to intellectual property. The first need is our call to stop the implementation of the TRIPS Agreement, which is eroding our traditional knowledge systems. After that we can begin to think of how we want to protect traditional knowledge." Consultation on IPRs and Traditional Knowledge, MSSRF, Chennai, September 30, 1998.

[28] Karnataka Planning Board (1996): 92 (Recommendation 2).

[29] "We need help from WIPO to fight invalid patents that were granted under other jurisdictions." Participant at Consultation on IPRs and Traditional Knowledge, MSSRF, Chennai, September 30, 1998.

[30] Reference was made, in particular, to patent no. US 5,401,504 on "Use of turmeric in wound healing", all claims of which were subsequently cancelled by the United States Patent and Trademark Office.

[31] For example, the plant *phyllanthus amarus* (local name: "*niruri*") is used in traditional medicine for hepatitis disorders in general, and a patent had been filed for its application in viral hepatitis B. This finding is novel in modern knowledge but it is not in the TK system, because viral hepatitis B is seen as a subset of hepatitis disorders. The identity of the virus type, though it may be critically important to modern medicine, is irrelevant in TK systems.

[32] Discussion with officials from the Foundation for the Revitalization of Local Health Traditions, Bangalore, October 1, 1998, and letter from Dr. D. Shankar, Director, Foundation for the Revitalization of Local Health Traditions, Bangalore, December 6, 1999.

[33] For example, in Sri Lanka the Code of Intellectual Property Act, No. 52 of 1979, as amended by the Code of Intellectual Property (Amendment) Act No. 17 of 1990 provides for the protection of expressions of folklore. It defines folklore as "all literary and artistic works created in Sri Lanka by various communities, passed on from generation to generation and constituting one of the basic elements of traditional cultural heritage" (Section 6).

[34] For example, in Sri Lanka economic and moral rights referred to in the Act, are exercised by the Minister in charge of culture, as provided by Section 12(1) of the Act.

[35] Folklore Panel, Arts Council of Sri Lanka, Colombo, September 29, 1998.

[36] On case of composers modifying traditional Sri Lankan tunes to suit modern times and examples of traditional singers and TV artists using traditional Sri Lankan music, Sri Lanka Performing Rights Society, Colombo, September 28, 1998.

[37] Reference was made to unauthorized audiovisual fixation of traditional Sri Lankan dances and unauthorized reproduction of such fixations abroad.

FFM to North America

Box 1. North America FFM: Country Membership in international IP treaties

International IP treaties	Canada	United States of America
Paris Convention	1925	1887
Berne Convention	1928	1989
Rome Convention	1998	-
Madrid Agreement	-	-
The Hague Agreement	-	-
PCT	1990	1978
UPOV Convention	1991	1981
TRIPS Agreement	1995	1995

Box 2. North America FFM: Country Membership in TK-related treaties and processes

TK-related treaty/process	Canada	United States of America
UNESCO Heritage Conv.	1976	1973
UNESCO Cul. Property	1978	1983
ILO 169	-	-
IUPGR – FAO	No	No
CBD	1992	-
UNCCD	1995	-

The FFM to North America was conducted from November 16 to 30, 1998. The mission visited the following countries: United States of America (USA) and Canada. The Interim Mission Report, which contains information as to the persons and entities with whom WIPO consulted, is set out in Annex 4.

The presentation of information in this section is organized under the following headings: Subject Matter, Objectives, Beneficiaries of TK Protection, Documentation, Means of Protecting TK, Regulation of Access to and Benefit-sharing in Genetic Resources, Other Policy Areas, and, Procedural Issues. The aboriginal people who provided this information emphasized that they were participating in the meetings of the FFM as individuals, not as representatives of their respective nations. It was further emphasized that the discussions held by the FFM were not considered to be consultations, but rather an exchange of views regarding the intellectual property needs and expectations of traditional knowledge holders, in particular aboriginal peoples.

Subject Matter

The subject matter which the counterparts of the mission considered in need of effective protection included traditional songs, dances, designs (especially designs embodied in traditional fashion and garments, e.g. moccasin designs, Inuit parkas, the *amauti*, etc.), medicinal and agricultural practices, plant varieties, TK about natural resources and their sustainable management, as well as traditional lifestyles.

Aboriginal people of North America emphasized the holistic nature of these knowledge elements by stressing that they were interrelated parts of "traditional lifestyles." Some of them considered that these traditional lifestyles formed part of the subject matter for which protection from illicit exploitation is needed since "there has been an explosion of the commercialization of traditional and ceremonial lifestyles in the context of "New Age" movements and markets."[1] Indigenous people in Canada and the US explained that certain indigenous lifestyles are being commercialized in activities such as North American Indian lifestyle summer camps in Germany, Aboriginal herbal/medicinal treatments, commercial spiritual seminars, and sweatlodges, etc.

Some counterparts questioned the qualification "traditional" in relation to some of the subject matter usually included in the term "traditional knowledge." They pointed out, for example, that *"PowWows are not "traditional" and should not be considered traditional knowledge. The contemporary Indian PowWow is a post-World War Two manifestation that has influence from 1890s Wild West shows. Today's PowWows are a contemporary pan-Indian manifestation. We are fooling ourselves when we say that these are "traditional" dances."*[2]

As one participant wrote, "*Many indigenous people avoid the term "traditional knowledge" because "traditional" implies that the knowledge is old, static, and passed down from generation to generation without critical re-evaluation, change or further development. In other words, the implication is that TK is not "science" in the formal sense of a systematic body of knowledge that is continually subject to empirical challenges and revision. Rather the term implies something "cultural" and antique. [...] What ... the international community needs to protect is "indigenous science."*"[3]

Other participants of FFM meetings qualified "TK" by context, in that it is characterized by an "*imbalance of power in relation to modern, scientific knowledge.*" "*What defines TK is a relationship of power: there is an inequity of power implicit in the definition and in this very process [i.e. the process of the FFMs].*"[4]

In Canada special attention has been given to the relevance and characteristics of traditional ecological knowledge (TEK) about sustainable natural resource management. Experts and TK holders classified this specific TK subject matter into three kinds of TEK:

(1) empirical data, which anyone can in principle obtain in a short time;
(2) historical data, which are maintained in oral traditions and historical records, and
(3) some conceptual data, without which (1) and (2) cannot be understood and analyzed.[5]

Parties who the FFM met with also identified different kinds of TEK:

- some derived from individual experience,
- some derived from contemporary and modern concepts, and
- some 'traditional knowledge' *strictu sensu*, in that it has been passed on for generations within the TK holder's community.

Insofar, TEK is a mixture of (i) individual experimentation and innovation, (ii) the public domain of modern society, and (iii) the exclusive traditional knowledge base of a community.

Some counterparts also distinguished between "traditional knowledge" and "indigenous knowledge" according to the knowledge holder's identity as an indigenous person in the meaning of ILO Convention 169. This distinction is discussed in more detail under the heading 'Beneficiaries of TK Protection' below.

Objectives of TK protection

The parties who the FFMs met with emphasized that IP protection should be compatible with and supportive of a wide range of policy objectives related to the protection and conservation of TK, including:

Legal certainty regarding rights in TK: A large number of counterparts emphasized that a clarification of rights in their TK was a primary objective, on which an informed management and utilization of TK would depend. This would provide a clear framework within which decisions can be made by TK holders and their communities about the adequate commercial exploitation of certain TK elements and the withdrawal from commercial exploitation of other TK elements (e.g., sacred, secret, proprietary, or religious elements).

IP NEEDS AND EXPECTATIONS #1
Making IPRs mutually supportive with specific TK related policy objectives, such as repatriation of cultural heritage, recognition of customary law, maintaining integrity of knowledge systems, etc.

The survival of indigenous cultures: Aboriginal counterparts pointed out that for Indigenous peoples IPRs fall into the ambit of a "politics of memory" and the survival and maintenance of indigenous culture. As one aboriginal participant put it, "for Indigenous peoples IPRs are a matter of survival: that is what distinguishes us from other intellectual property right holders. For Indigenous peoples protection of their cultural and intellectual property is a matter of survival *as* an Indigenous people, as a community."[6]

The recognition of customary law and practices governing TK: Counterparts emphasized the importance of customary laws and protocols that govern the creation, transmission, reproduction and utilization of TK. As one participant put it at a Roundtable which the mission attended, "respect for local law is a fundamental mechanism for respecting TK." [7]

The repatriation of cultural heritage: IP protection of TK should be consistent with, and facilitate the repatriation of the cultural heritage of indigenous peoples that has been appropriated in the past and is presently stored in museums, archives and exhibitions domestically and abroad.

The maintenance of oral traditions: The maintenance, revival and protection of oral traditions, since they are linked to the protection of TK from disappearance. As one individual pointed out, "Instead of talking about protection we have to revive oral traditions. "Protection" is protection from knowledge lost."[8]

Indigenous rights: The recognition of the rights of indigenous peoples *as indigenous peoples* in their intellectual creations and their cultural heritage.

Creating incentives for transmission of TK/IK*:* Full disclosure of TK in order to prevent its disappearance with the passing away of the older generations. Participants of the FFM argued that in the case of TK holders the policy incentive for disclosure through legal protection is more urgent than with modern inventors, since disclosure here is required not only for the promotion of innovation in society, but also for the conservation of the traditional knowledge base of that society. This knowledge base of a society, in their view, is tied to its identity, history, environmental sustainability and socio-economic development.

Maintaining the integrity of TK systems: TK holders and experts pointed out that to respect a TK-formation is also to respect the protocols by which one may acquire it. They said that "Intellectual property protection should maintain the integrity of traditional knowledge *as knowledge systems*, with a discrete set of rules and boundaries." As one expert explained:

> *"The most important thing to recognize is that indigenous knowledge is embedded in indigenous knowledge-systems which are very specific in each case. I therefore disagree to conceive intellectual property protection for indigenous knowledge as developing procedures for buying and selling indigenous knowledge as data. That already transforms indigenous knowledge into what it is not. The different indigenous knowledge systems can be described as "disciplines," i.e. more than just a pile of data. They include ethical standards, standards of responsibility, standards for transmission and they form a system of rules and practices which are very specific. They include different practices of earning and sacrificing to gain knowledge. The knowledge may stay in a community for hundreds of years, but the process of learning it in each generation can be very different. If you are going to become a knowledgeable person, you have to work for it, but that is different from how you work for knowledge at a University; when you gain authorization (i.e. like a diploma from a University), you have different kinds of work that you had to do for this authorization. Each peoples' indigenous knowledge system is a specific "discipline" with its own protocol of how the knowledge can be learned."*[9]

TK promotion as part of a development strategy for indigenous small- and medium-sized enterprises and capacity building inside indigenous communities.[10]

To protect commercially valuable TK from unauthorized appropriation and illicit commercial exploitation,[11] such as TEK used for Environmental Impact Assessments of resource management projects.

Beneficiaries of TK Protection

Terminological issues were raised in relation to the terms used to define the beneficiaries of potential legal protection of TK or indigenous knowledge. Some FFM participants distinguished between "holders of traditional knowledge" in general and "holders of indigenous knowledge" in particular, which are indigenous or aboriginal peoples. In Canada the Constitution Act provides that "[i]n this Act, 'aboriginal peoples of Canada' includes the Indian, Inuit and Métis peoples of Canada."[12]

Other persons distinguished between "Indigenous peoples" and "local communities," referring to the language of Article 8(j) of the CBD. They pointed out that in Canada there are "local communities," such as the Huggurites, Mennunite, Amish, trappers and hunters." Reference was also made to the terminology of the relevant articles of the United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (1994).[13]

Documentation

Numerous FFM participants emphasized the importance of TK documentation with regard to several policy objectives:

- intellectual property protection of TK;
- the preservation of TK-systems;
- documentation for the purpose of teaching and transmitting TK;
- documentation for the maintenance of cultural diversity and integrity; and
- the preservation of the environment through documentation of sustainable environmental practices.

Based on their experiences from ongoing documentation initiatives, TK holders highlighted several priority issues which required further clarification in terms of their intellectual property aspects, including the following:

- Commercial exploitation of documentation data;
- Modalities for the community-based authorization- and decision making-process regarding the extent and procedure of a documentation initiative;
- Composition of the documentation team, the functions, rights and obligations of individual stakeholders and team members;
- Regulation procedures for access to, and use of, the documentation data resulting from the documentation process;
- IPRs related to the initial TK subject matter which was documented (e.g. traditional medicinal practices that may be subject to trade secrets) vis-à-vis IPRs related to the reproductions and compilations resulting from the documentation activity about that TK subject matter (e.g., *sui generis* protection of ethnobotanical databases or ethnobotanical collections as copyrighted literary works);
- Internet publication and online exchange of documentation data.

The counterparts of this FFM provided numerous examples of TK documentation activities across North America. For instance, the Tulalip Tribe has decided to systematically have all its TK documented by tribal members. As one tribal member explained, "[f]or stabilizing our culture, this is important."[14] The Stoney Nation in Canada is mapping its TK systems. As one participant pointed out,

> *"the exercise of compiling databases of TK is central to any possible future protection of TK, especially in industrial property. There can be no exercise of rights without clear evidence of the protected knowledge. But the question is, who will do this collection and compilation? There has to be clear information on the intellectual property consequences of what we have already done [i.e., TK databases which have already been compiled]. And then you have the problem of enforcement."*[15]

In this regard, several TK holders considered the online exchange and dissemination of documentation information as a possible means of improving the use of existing documentation.

IP NEEDS AND EXPECTATIONS #2
Developing documentation strategies which take into account multiple objectives, including IP protection, TK and environmental preservation, cultural diversity, etc.

IP NEEDS AND EXPECTATIONS #3
Practical information on intellectual property implications of, and technical modalities for, disclosing TK documentation data in the digital environment.

IP NEEDS AND EXPECTATIONS #4
Systematic integration of TK information into searchable prior art during examination of patent applications for TK based inventions.

The IP aspects of TK documentation shall be described below with reference to three documentation initiatives about which the FFM received detailed information:

- the project of the Grand Council of the Crees to document their traditional ecological knowledge in the context of environmental impact assessments in Cree territory;
- the initiative of the Nisga'a Tribal Council Office (NTCO) to record 'entitlement stories' in the context of native land claim settlement; and
- the work of the Nunavut Planning Commission (NPC) for developing a strategy to document TK in Nunavut.

Under the direction of the **Grand Council of the Crees** several large scale documentation projects on the traditional ecological knowledge (TEK) of the Crees about natural resource management have been undertaken. The Crees pointed out that the Canadian Environmental Assessment Agency now includes TEK in its procedures for environmental impact assessments. Specifically, the Cree are party to the James Bay and Northern Quebec Agreement (JBNQA), which provides *inter alia* for recognition of the rights and involvement of Cree people.

Under the JBNQA, the territory was divided into Category I, II, and III lands.[16] On Category III lands the Quebec government, the James Bay Energy Corporation, Hydro-Québec and the James Bay Development Corporation have specific rights to develop resources. In order to do so, the federal and provincial governments, depending on jurisdiction, must assess the environmental impact of resource development projects.

In these environmental impact assessments (EIAs) of resource development projects, TEK plays a significant role. Construction companies proposing large-scale projects are required to include into their planning some Cree traditional ecological knowledge. This raises questions about who is to document the TEK. "If the planners of the project collect the TEK or have it collected, it is likely to be skewed in favor of starting the proposed projects," one member of the Grand Council argued. He continued,

> *"they think it's a matter of just asking about the location of resources, not about the management of the resources. But our knowledge goes beyond knowledge of location, characteristics of animals and resources. Rather it goes into ways and means of sustainably using, developing and managing those resources."*[17]

Consequently, the Cree are beginning to document Cree TEK themselves. They based this decision on the assumption that "the more we document, the more our TK will be recognized."[18]

Members of the Grand Council of the Crees also reported on TEK documentation for an EIA in the context of a Cree project to build a road, connecting a Cree community with the highway system. This initiative involved the documentation of TEK held primarily by several Taliman.[19] There are five traplines crossed by the road proposed by the Cree and so five Taliman were responsible. The pilot project to document the TEK resulted in a map on which all the TEK was inscribed and the map was then validated by the Taliman. Much of the knowledge which was on the maps was secret and the Cree felt they could not publish it. After consultation with the Taliman, the Cree decided to take traditional medicinal and ecological knowledge out of the map, but wanted cultural sites to stay on the map.

Participants pointed out that there are pre-defined requirements for disclosing and transmitting TEK by Cree Elders. These requirements are referred to as the concepts of 'respect' and 'understanding':

> *"Elders will only share with you then, when they know that you will understand it. The criteria of sharing is the understanding of the recipient. What is the concept of 'understanding'? This concept defines the difference between traditional ecological knowledge and satellite readings of where the caribous are at a given time of the year. One is context sensitive, the other is not. [...] The basic condition, however, is that you understand the Cree language."*[20]

While several parties commended such inclusion of TEK as a positive step towards recognition of its environmental value and potential, some members of the Cree argued that there was a persisting lack of recognition of TEK for it to become a basis of environmental policy formulation. "Cree traditional environmental knowledge so far has not *influenced* government policy, it has only been *subject* to such policy."

In the end, all participants were univocal that the decision making-process about TK documentation would have to follow traditional structures of governance and authority: *"The Elders have to decide what needs to be protected and documented. For instance on our traditional medicine, our Elders have said that they don't want to have it published."*[21]

The second documentation initiative on which the FFM received detailed information was undertaken by the **Nisga'a Tribal Council Office (NTCO)**. The NTCO began documenting TK, oral traditions and Nisga'a history, following a Supreme Court decision in the Calder Case (1973) on land claims of the Nisga'a. In the subsequent Delgamuukw Decision (1991), the British Columbia Court of Appeal accepted oral histories as evidence of use and occupation, when clearly documented. Now numerous aboriginal peoples are documenting their use of resources and land as evidence in the context of native land claims settlement.

In consequence, for the past 15 years the NTCO cultural department has been systematically gathering information from Elders about Nisga'a TK and land use. Elders also had to decide whether it was acceptable to the

Nisga'a that stories would be written down. As one member of the NTCO cultural department pointed out, *"Oral traditions are more flexible, problems of discomfort arise in having to put them in written form."*

In this documentation effort, the NTCO has focused on "entitlement stories," which have a close relation to land and resource use under customary law and practice. The basic family unit is the 'House' and each House has 'House property.' Part of that property is the 'entitlement story' to the land:

> *"In the past, there were only certain members of the family who could tell the story, and traditionally such a story would not be told to anybody who is not a member of a particular House. However, once the entitlement story was recorded and written down then, in effect, what has happened is that all society has access to it. And so the customary laws associated with the entitlement story are not being observed."*[22]

In this situation, the Nisga'a began their process of policy and documentation drafting. However, there is at present "no vehicle for us to fully protect that information from use/misuse by outsiders: our entitlement stories, totem poles, and artifacts." Nisga'a participants explained that there exists a tension between traditional and modern regulatory regimes with respect to access to information regarding land and resource use.

> *"We're in a cultural conflict situation, where we are set up in an office, and where we have files of information on House property, and traditionally I would not have had access to all this information. ... There is a problem because I know all the House stories, but I can't be the one to pass them on because this is forbidden by customary law. It's a problem of formal authorization – which really should come from the House Chieftains and Matriarchs."*[23]

For the past few years, the **Nunavut Planning Commission (NPC)** has been mapping wildlife populations, human use and areas of archaeological significance while examining land use issues. This mapping work combines the traditional knowledge of the Inuit with the latest computer mapping technology. The database resulting from this work includes the Nunavut Environmental Database (NED), which is a subset of the Arctic Institute of North America's ASTIS database (Arctic Science and Technology Information System). NED has been prepared for the Nunavut Planning Commission by selecting ASTIS records about Nunavut. In April, 2000, NED contained over 14,700 records, including more than 500 records on indigenous knowledge.[24]

The Nunavut Planning Commission has made the Nunavut Environmental Database available on the Internet for search and retrieval. Practical information on intellectual property implications and technical modalities of such public disclosure was required in light of the NPC's plans to develop a comprehensive documentation strategy for all TK in Nunavut and possible incorporation into databases.

The NPC is currently developing a comprehensive strategy for all TK of Nunavut. It will provide benchmarks on key issues where Inuit culture is most threatened and it will involve promoting as well as documenting TK and the Inuit language. Preliminarily, one participant considered that "I am not aware of anything that Inuit do not want to be recorded, except for shamanism."

Means of Protecting TK

The availability, scope and use of rights in TK is presented below under the following headings: patents, trade secrets, trademarks and certification marks, geographical indications, copyright and related rights, customary law and practice, and the regulation of access to, and sharing of benefits in, genetic resources.

Patents

On this FFM patents were mentioned primarily not as an IP tool that TK holders were seeking to utilize for themselves but as a tool the application of which by others to TK should be limited. Participants were of the opinion that its use by non-TK holders was leading to misappropriation of TK and illicit use of TK-based inventions. They pointed out that insufficient recognition was being given to TK in the granting of patents for TK-based inventions. The systematic integration of TK information into searchable prior art was recommended as a possible improvement to what was perceived as an inequity in the current patent system. Concerns were expressed over patent applications that had been filed, claiming, *inter alia*, gene sequences of indigenous peoples (for details see 'Regulation of Access to Human Genetic Resources' below).[25]

IP Needs and Expectations #5
Exploring possibilities of using trade secrets to protect TK, which is being kept secret by its holders.

IP Needs and Expectations #6
Creation of a database of officially recognized insignia of indigenous peoples.

IP Needs and Expectations #7
Assistance in using certification marks to certify indigenous crafts and products.

Participants at the FFM meetings also pointed out that application fees for filing patent applications by indigenous peoples and other TK holders should be reduced, to make the patent system more accessible to them.[26]

Trade secrets

The role of trade secrets was discussed by FFM participants in relation to the know-how incorporated in their traditional ecological knowledge (TEK). Some of them inquired whether traditional know-how about natural resource management which tribes are keeping secret, could be protectable in the same way as technical know-how which is kept secret by large companies in their commercial operations. Reference was made to Section 7 of Part II, TRIPS Agreement, on the Protection of Undisclosed Information. It provides that "[n]atural and legal persons shall have the possibility of preventing information lawfully within their control from being disclosed to, acquired by, or used by others without their consent in a manner contrary to honest commercial practices so long as such information"[27] fulfills certain requirements. The requirements set out by the TRIPS Agreement require that such information:

- (a) is secret in the sense that it is not, as a body or in the precise configuration and assembly of its components, generally known among or readily accessible to persons within the circles that normally deal with the kind of information in question;
- (b) has commercial value because it is secret; and
- (c) has been subject to reasonable steps under the circumstances, by the person lawfully in control of the information, to keep it secret.[28]

For example, the Cree considered that in the context of EIAs in some cases these requirements might be fulfilled since (a) "[t]he Taliman are meticulous about concealing their knowledge towards outsiders;" (b) the information has commercial value because it is secret;[29] and (c) reasonable steps had been taken by the Grand Council to keep the knowledge secret.[30]

Trademarks and certification marks

On this FFM IP issues surrounding the use of marks were raised in two areas: (1) the registration of indigenous signs or combinations of signs as trademarks by non-indigenous persons; and (2) the use of certification marks by indigenous peoples and other TK holders to certify the authenticity of their products.

Participants at FFM meetings in the United States of America referred to the recent Request for Comments issued by the United States Patent and Trademark Office (USPTO) on Official Insignia of Native American

BEST COPY AVAILABLE

Tribes.[31] The Report on the Official Insignia of Native American Tribes issued by the USPTO after a seven-month long statutorily required study recommended that:

- An accurate and comprehensive database containing the official insignia of all State and federally recognized Native American tribes should be created;
- The USPTO should create, maintain and update this database;
- Relevant federal agencies should work cooperatively to educate and assist Native American tribes in their efforts to protect their official insignia;
- Relevant federal agencies should work cooperatively to educate the public at large with respect to the rights surrounding official insignia of Native American tribes.[32]

Based on the comments received and in light of existing case law interpreting Section 2(b), 15 U.S.C. § 1052(b), of the U.S. Trademark Act, the USPTO proposed the following definition of the term "Official Insignia of Native American Tribes":

> *'Official Insignia of Native American Tribes' means the flag or coat of arms or other emblem or device of any federally or State recognized Native American tribe, as adopted by tribal resolution and notified to the U.S. Patent and Trademark Office.*[33]

Some aboriginal people used the example of crest names to illustrate how the erosion of TK systems links the expression of stories and names. They explained that crest names are being used as person names, which distorts their traditional use, out of desperation that crest stories will be lost.[34]

IP Needs and Expectations #8
Fee reduction for TK holders and indigenous peoples for registering marks, in particular certification marks.

IP Needs and Expectations #9
Exploration of means to better manage the interface between the exercise of copyright and related rights by aboriginal artists on the one hand and the customary understandings and expectations of and laws of their communities on the other.

They also provided examples of what they considered to be an appropriation of Native American signs by non-Native natural or legal persons in order to distinguish their goods or services from those of other undertakings. For example, the Onake Mark of the Onake Corporation consists of a Mohawk word;[35] the name of a revered Lakota figure, Tasunke Witko, or 'Crazy Horse,' was used by a brewing company in Brooklyn, NY, to market malt.

Other participants noted the passing off of Asian-made products as Native American products overseas. Examples which they referred to included the passing off of low-end Native American crafts in Taiwan; the passing off of Asian artistic works as authentic Inuit art; as well as the passing off of European-made imitations as high-end Native art.

Besides avoiding the misappropriation of Native American symbols by non-native persons, aboriginal participants expressed a need for improved use of certification marks by indigenous peoples and other TK holders to certify their products. Some aboriginal peoples in Canada have already been using certification marks to certify their products. For example, the Inuit have used the 'Igloo Tag' to certify the authenticity of Inuit art,[36] and the 'Irocraft' mark has been used by a Six Nations Company to market Iroquois crafts, books and cultural artifacts, such as masks, etc.[37] A number of FFM participants requested assistance with improving the operation of their use of certification marks, such as the Igloo Tag, and with the registration of further marks. In this regard, they called for a reduction of the costs of registering trademarks for aboriginal small- and medium-sized businesses.

Copyright and related rights

According to the persons who the mission met with, copyright is the branch of intellectual property law which is most used by aboriginal peoples. Participants raised copyright issues primarily in relation to aboriginal literary and musical works. For example, members of the Cree nation pointed out that there were cultural sensitivities attached to exercising the right of translation in literary works based on oral traditions and tradi-

BEST COPY AVAILABLE

tional stories.[38] As one of them reported, *"I've written 10 children's books for Cree children, based on Cree stories and lifestyles. Then I get a call from Germany and Italy: they want to translate the book. But there is a lot of misinterpretation and misappropriation in the translations. I stopped writing because of this problem of misinterpretation."* The person explained that this decision was informed by a collective decision of Cree Elders: *"A lot of things that are interpreted wrongly are an insult to the community. The Elders have thought about this problem and wanted to find ways to bring the misinterpretations home and keep and interpret them in a proper environment."* Participants at other meetings of the FFM also reported copyright infringements of aboriginal artistic works on greeting cards pirated in neighbouring countries.

Aboriginal participants emphasized that for aboriginal peoples performers' rights fall into the ambit of a politics of memory and the maintenance of Aboriginal culture. The right to perform in public a musical work under customary law is often subject to certain context-specific requirements. For example, *"the Elder says 'I have been given a song. And this song I will use only in sacred ceremonies.' Sometimes the Elder before he dies will pass it on to his helper. In that case, when I am at a social gathering and I hear a song, I will not sing it, unless I have been given permission by the Elder. I was once given a song at a ceremony, I sung it at an other ceremony for which it was given to me, but after that I let it go."*[39]

THE GRASS DANCE SOCIETIES

"The PowWow comes from the Grass Dance Society: this dance was given to a Souix group (part of the Dakota group) from the Omaha people, including the rights of passage and passing on. That group of the Souix liked it and passed it on to other Souix, Cheyenne, Blackfoot people, and so on. In each of those instances where it was passed on the traditional protocols were observed: there was a formal request, a gift giving ceremony and something was offered in return. This way the Grass Dance spread very rapidly.

In 1889, when the U.S. government declared it illegal to practice such dances, the dance was modified from the Omaha way of doing it: the songs were put into other dialects of the language and there was a change in the order of ritual segments (there are seven segments to the Grass Dance). But the requirements for the membership and officers in the Grass Dance Society remained the same. The Grass Dance Society was a Society for the bravest warriors to publicly proclaim their lifetime achievements. Membership was consensus-based and new members had to be invited to join and be initiated. The Grass Dances were hosted by individual members of the Grass Dance Society."

Participant in the Roundtable at Wanuskewin Heritage Park, Saskatoon, Sasketchuan, 25.11.98.

Customary law and practices

Participants at the meetings of this FFM pointed out that TK has been subject to customary laws and protocols which protect certain intangibles in the local context. They described such customary protocols with respect to five areas of subject matter: traditional songs, traditional dances, traditional designs, traditional names, and traditional medicine. One participant pointed out that *"documentation of the outlines of indigenous knowledge systems, as well as local laws and any local marks, will be essential [...] to achieve reasonable levels of clarity and certainty."*[40]

With respect to the protection of **traditional songs,** TK holders explained that customary protocols included rules for the creation, performance and transfer of songs. They pointed out that,

> *"if somebody is fasting and sees a vision about a song that they are to sing, that vision includes stringent terms of how the song may be used ... Now, it is possible to acquire a song from another individual: Songs can be traded just like any other material. If you have a song that I like, I can make an offer to you that I can trade the song for something else. You may give me the song and the right to sing that song."*

They pointed out that the original intent of how the song was to be used would be considered in its transfer from right holder to right holder. If the song was intended as a song for social gatherings then it could be passed on freely, whereas if it was intended for assistance in vision quests, then the transferee has no right to share the song without prior authorization.

> *"Only the person to whom the song has been passed on has the right to use it. Sometimes, this could be a whole drummer group. But they don't have the right to hand it over to others. The recipients would first have to ask: do you give us the right to share this song with somebody else?"*[41]

Participants at other meetings pointed out that families acquired new songs through intermarriage.[42]

The second area of subject matter where TK holders described customary protection of TK was the area of **traditional dances**. They observed that the customary protocols of transfer of dances between different nations had been observed closely in the past and were becoming less stringent in recent times through the exchange of songs in the context of modern pan-Indianism.[43] For an illustration of such developments in the context of the modern, pan-Indian PowWow, see the Text Box on "The Grass Dance Societies".

FFM counterparts in various regions pointed out that **traditional designs** were subject to customary laws and protocols among numerous aboriginal peoples. Referring to traditional designs embodied on tipis, participants explained that,

> *"we can identify individual creators. The tipi designs were very limited since they were the results of vision quests. We know the original owners of the tipi designs; they transferred the ownership to family friends who then transferred it to the current owners. The designs cannot be replicated without a transfer of the rights and anything we have today was transferred through ceremonies."*[44]

IP NEEDS AND EXPECTATIONS #10
Better understanding of customary laws and protocols that apply to TK subject matter in the local context.

IP NEEDS AND EXPECTATIONS #11
Recording the availability, scope and use of TK protection under customary laws and protocols.

IP NEEDS AND EXPECTATIONS #12
Clarifying the extent to which customary laws and protocols are and can be applied.

They pointed out that such rights could be assigned:

> *"If I have a tipi design and Dorothy wants my design, she can send a messenger and ask for it to be transferred. If I agree, she has to transfer it through a ceremony. Once I give my rights to the design over to her, I transfer her the right to use it. I can't even use it: I cannot make a replica, it is simply not mine any more, it's hers. She is only allowed to make replica if the first one is destroyed, but she can't pitch two or ten tipis with the same design. There is only one."*[45]

The point was made that similar protocols existed in respect of designs embodied in other products, such as Weaseltail dresses, headdresses, moccasins, etc. Participants at other meetings of the mission provided documentation of specific examples of exclusive rights in designs, the transfer of which could be traced back to the 1840s.[46] They mentioned that modern tents were being developed on the basis of the traditional tipi designs and that traditional moccasin designs were copied in certain Asian countries.

The fourth area where a number of TK holders referred to customary protocols was the use of **traditional names**. They explained that first nations have systems of naming and

> *"if you want to take a name it has to be done at a potlach. You are given names as child, teenager, and adult. If you are a high-ranking chief you are given several names; with the names come certain rights to dances and ceremonies. The name is more important than the person: it is all the people that have held the name in the past; all those people have invested in the name. What happens at the potlach becomes the Law."*[47]

BEST COPY AVAILABLE

They also pointed out that names were traded at Grass Dance Society meetings (see Text Box "The Grass Dance Societies" above).[48]

In the area of **traditional medicine**, TK holders pointed out that the ownership of "medicine bundles" was associated with an exclusive right to practice certain medicinal practices and to hold certain medicinal knowledge among some tribes.[49] The ownership of the bundle was associated with the custodianship of certain TK elements.

Besides explaining the availability, scope and use of customary protection of certain TK elements, they pointed out that customary laws and protocols included a variety of mechanisms for dispute settlement[50] and for the enforcement of rights, such as public shaming or banishment.

In general, participants of FFM meetings, such as representatives of the Nisga'a Tribal Council Office, called for further IP information and advice on how to proceed in situations where both modern and customary regulatory regimes apply to their TK:

> *"We are in a cultural conflict situation where we are set up in an office, and where we have files of information on House property, and traditionally I would not have had access to all this information. I have access to all this information although I shouldn't by customary law, and I do want to observe our laws. ... It is a problem of formal authorization – which really should come from the House Chieftains and Matriarchs. In the past, if I divulged information on House property and I had no right to, I would be chastized, shamed, and disrespected. It's also a concern within our nation as well. So we are looking for direction: for example, is it a good idea to codify our laws?"*[51]

IP Needs and Expectations #13
Clear intellectual property information on the role of IPRs in access to genetic resources and benefit sharing arrangements for the benefits arising from their use.

Some FFM participants considered the local consideration of customary protocols as a supplement to the protection of TK by modern intellectual property systems. As one Cree Elder put it: *"Our drums do not speak a language other than our language. Our traditional knowledge should not be protected only by a system from the outside. It should also be connected with the ways by which our nations have protected and respected our traditions."*[52]

Regulation of Access to and Benefit-sharing in Genetic Resources

Participants at the meetings of this FFM raised concerns about the role of IPRs in access to, and the utilization of, genetic resources. These concerns related to the granting of patents with claims relating to human genetic resources on the one hand and to microbial, plant and animal genetic resources on the other.

Regulation of access to human genetic resources

Counterparts of the FFM expressed concerns about the equity and ethics of patent applications, the claims of which relate to human genetic material, particularly that of indigenous peoples. They regarded the IP aspects of ongoing genomic research on indigenous peoples as ethically problematic.[53]

Some of them also referred to the UNESCO Declaration on the Human Genome and Human Rights (1998), which establishes the International Bioethics Committee of UNESCO. FFM counterparts in Canada pointed out that Canada had conducted national consultations prior to the adoption of the Declaration, and had promoted the accompanying Resolution on Implementation and Followup for the Declaration, which calls, *inter alia*, for consultations with indigenous peoples.

Regulation of access to microbial, plant and animal genetic resources

Members of aboriginal peoples referred to ongoing bioprospecting activities on tribal territories or access to plants in parks, the IP implications of which were not clear to them.[54] For example, the Leech Lake Band in Minnesota reported that researchers from the University of Minnesota were seeking to prospect wild rice on the territories of the Band. The Leech Lake Band is the only Band in the US that has a cooperative agreement with the State to manage wild rice and thereby has complete jurisdiction over the wild rice. The Band regulates access to the rice through permits to three groups:

- non-residents of the reservation cannot harvest Wild Rice on the reservation at all;
- non-Indian residents of the reservation need a permit from the State and a permit from the Leech Lake Band; and
- Indian residents of the reservation need no permit to access and harvest the rice.

The access request to which they referred was for the collection of leaf samples of the rice in all lakes of Minnesota. The Department of Natural Resources of the State government did not issue the access permit, since it would also have included access to the Reservation lakes. When the tribal representatives and researchers met it was decided that access for collection would not be granted, due to a lack of understanding about the IP implications of such access and inadequate benefit sharing arrangements. Further clarification about the IP implications of providing access to plant and microbial genetic resources was requested.

Participants at several meetings expressed concerns about the work of ethnobotanists, which in many cases involved in their view a misappropriation of indigenous peoples' traditional knowledge related to genetic resources.[55] In one case a herbalists had published a book based on traditional knowledge of medicinal plants.

Other Policy Areas

Repatriation of and access to cultural heritage

One of the most urgent concerns which aboriginal peoples expressed was the need to repatriate cultural heritage which had been misappropriated in the past and was currently situated in museums, archives, galleries and private collections around the world. They emphasized that

> *"our artifacts are made to be used, not to sit in museums. The conservation of cultural heritage is not for "preservation," but for cointinued use. Indigenous peoples don't want to get the artifacts back in order to "own" them, but to use them."*

For example, certain masks which form part of Mohawk cultural heritage were repatriated to the Mohawk nation and the Kanien'kehaka Raotitiohkwa Cultural Center returned them to the relevant community members for their use.[56]

IP NEEDS AND EXPECTATIONS #14
Financial and legal assistance to indigenous peoples for the acquisition, exercise and enforcement of IPRs over their cultural heritage.

In some cases, the need concerns not the repatriation of heritage, but access to certain elements of such heritage which is currently housed in museums or other collections and which aboriginal peoples wish to access for specified purposes.[57]

TK holders in the United States of America referred to the Native American Graves Protection and Repatriation Act (NAGPRA), 1990, and the ability of First Nations located in the USA to apply for grants to assist with the repatriation of Native American cultural property.[58] They suggested that similar grants should be available to indigenous peoples to assist with the protection of their TK through IPRs. They suggested that indigenous populations should be able to apply for financial assistance for the acquisition costs of IPRs or should be charged reduced fees for such acquisition.

They also emphasized that cultural property includes sites, such as religious, ritual and plant collection sites, and that there is a linkage between rights to cultural property and rights to territory.

Protection of indigenous languages and maintenance of linguistic diversity

Aboriginal people explained that for indigenous peoples the maintenance of their languages has been a struggle intimately tied to that of maintaining their TK. They said that historically the erosion of TK and indigenous language are the result of an "annihilation of our culture by forcing children into White schools and denying them to speak their languages. People would talk to each other in Indian languages behind buildings in secret. At that time, large parts of our traditional knowledge was lost."[59] As representatives of the Bloodtribe put it, "Our biggest problem is our language: once we loose our language, we loose our identity and knowledge."

IP NEEDS AND EXPECTATIONS #15
Mutual supportiveness between the protection of intellectual property and the protection of indigenous languages.

IP NEEDS AND EXPECTATIONS #16
Full and effective participation of indigenous peoples in policy processes regarding IP and TK.

IP NEEDS AND EXPECTATIONS #17
IP awareness raising through workshops which allow First Nations to consult amongst themselves about their IP policies and priorities.

Protection of human and indigenous rights, in particular indigenous land rights

Aboriginal people who met with the FFM repeatedly referred to the Draft United Nations Declaration on the Rights of Indigenous Peoples, Article 29 of which provides for "the recognition of the full ownership, control and protection of [Indigenous peoples'] cultural and intellectual property." Furthermore, Article 13 of the Draft Declaration provides that "Indigenous peoples have the right to manifest, practice, develop and teach their spiritual and religious traditions, customs and ceremonies" and Article 3 provides that "Indigenous peoples have the right of self-determination." Some participants indicated that, if the Draft Declaration were to be adopted, in their view not all of these indigenous rights were yet fully respected.[60]

Environmental conservation and sustainability

TK holders emphasized that Native American traditional knowledge systems include strong values for harmonious lifestyles and sustainable utilization of the environment. In contrast, they maintained, "policies on the environment have been developed from a non-native perspective. Concepts like 'sustainable development' have emerged from texts like the Brundtland report. However, there is a need to take a dual approach: that is, to use Western science *and* to use traditional approaches and TK for sustainable resource management."[61]

They pointed out that the Canadian Environmental Assessment Agency is now recognizing and using TK for sustainable resource management and environmental impact assessments.

Procedural Issues Concerning the FFMs

The FFM discussions were held for an exchange of views and assessment of needs and were not considered consultations. Participants in FFM meetings thus participated in the discussions as individuals rather than as representatives of their communities, institutions or nations. The participants on this FFM raised issues about procedural aspects of the fact-finding missions and subsequent processes. These issues concerned primarily the full and effective participation of indigenous peoples in the FFM process, including the reporting. Indigenous participants demanded "access to the forum and the process: right now it is the Nation State governments that are allowed to speak about intellectual property in relation to indigenous knowledge."[62] They also raised concerns about the observance of indigenous protocols in meetings with indigenous peoples, such as prayers and the offering of tobacco.[63] Based on previous experiences, they expressed reservations that "often forums like this are used to validate a process that is already going on. And we will be used to legitimize the whole process."[64]

Participants at the Government/Indigenous Working Group on Article 8(j) of the CBD considered, "how you will manage this process should be an issue for us all. For whose benefit will this be put together? Will your findings be field tested?"

SUMMARY OF INTELLECTUAL PROPERTY NEEDS AND EXPECTATIONS

1. Making IPRs mutually supportive with specific TK-related policy objectives, such as repatriation of cultural heritage, recognition of customary law, maintaining integrity of knowledge systems, etc.
2. [illegible] strategies which take into account multiple objectives, including IP protection of TK and [illegible] diversity, etc.
3. [illegible] property [illegible]
4. [illegible] of TK information into searchable prior art during examination of patent applications for TK-[illegible]
5. [illegible] trade secrets to protect TK [illegible] this being kept secret by its holders
6. [illegible] recognized [illegible]
7. [illegible] marks to certify indigenous crafts and products
8. [illegible] indigenous peoples for registering marks, in particular certification marks
9. [illegible] manage the interface between the exercise of copyright and related rights by aboriginal [illegible] customary understandings, expectations and laws of their communities [illegible]
10. [illegible] customary laws and protocols that apply to TK subject matter in the local context
11. [illegible] scope and use of TK protection under customary laws and protocols
12. [illegible] customary laws and [illegible] and benefit [illegible]
13. [illegible] information on the role of IPRs in access to genetic resources and benefit [illegible] from their use
14. [illegible] indigenous peoples [illegible] TK
15. [illegible] the protection of intellectual property and the protection of indigenous languages
16. [illegible] indigenous peoples [illegible] IP and TK
17. [illegible] workshops which [illegible] among [illegible] IP policies and priorities

BEST COPY AVAILABLE

Notes

[1] Participants of discussions at Minneapolis, MN, (November 16, 1998) pointed out: "The commercial exploitation of the ceremonies and lifestyles is ongoing, e.g. in the form of commercialized spiritual seminars, Sweatlodges, the 33 ceremonies of the Sundance Way of Life, the Fire Mountain Dances of the Appaches, etc.. The exploitation can be stopped when it takes place on the reservations but not when it is off the reservations, because there is no clear definition of the lifestyle. However, the exploitation of the ceremonies include the use of ceremonial practices and objects, such as buffalo skulls, pipes, medicine bundles, ceremonial sticks, etc. E.g. people in Europe live the Dakota lifestyle. Often members of the First Nations themselves become "spiritual salesmen." "

[2] Participant in the Roundtable at Wanuskewin Heritage Park, Saskatoon, Sasketchuan, November 25, 1998.

[3] Written comments, dated July 21, 2000, received from Prof. Russell Barsh, Associate Professor, The University of Lethbridge, Lethbridge, Canada, and Engelberg Center for Innovation Law, Institute of Law and Society, New York University, New York, USA.

[4] Participants of the Government/Indigenous Working Group of Article 8(j) of the Convention on Biological Diversity, Canadian Museum of Nature, Ottawa, November 26, 1998.

[5] Participant at the Roundtable on IP and TK at the Grand Council of the Crees, Montreal, November 30, 1998.

[6] Participant of Roundtable at the Ethnic Cultural Center of the University of Washington, Seattle, WA, November 20, 1998.

[7] Participant at the Roundtable on Traditional Knowledge and Intellectual Property Rights, Arctic Institute of North America, University of Calgary, Calgary, November 24, 1998.

[8] "Until the 60s we had no written language. Our stories, histories, etc. were passed on through oral traditions, totem poles, carvings on longhouses and boxes [...] this is the only way of keeping the history alive." Participant of a Roundtable at the Ethnic Cultural Center of the University of Washington, Seattle, WA, November 20, 1998.

[9] Participant at the Roundtable on Traditional Knowledge and Intellectual Property Rights, Arctic Institute of North America, University, University of Calgary, Calgary, November 24, 1998

[10] Reference was made to Canada's Aboriginal Action Plan, entitled *Gathering Strength,* which is based on the Report of the Canadian Royal Commission of Aboriginal Peoples (ARCAP) (participants at the Roundtable with Federal Departments, Ottawa, November 27, 1998.) Furthermore, participants at the Sixth Annual Tribal Environmental Protection Agency Conference, San Francisco, November 19, 1998, referred to the work of the "nation building model of development" elaborated as a development strategy for Indian nations by the Harvard Project on American Indian Economic Development.

[11] "There is a tension: on the one hand, the Cree do not want the TEK to get out because they don't want others to use the information to get to the resources. On the other hand, the TEK needs to get out because it will be considered in the environmental impact assessments for large scale projects, and can therefore prevent negative impact projects and consequent environmental damage. This constitutes a major dilemma." Participant at the Roundtable on IP and TK at the Grand Council of the Crees, Montreal, November 30, 1998.

[12] Section 35(2) of the CONSTITUTION ACT, 1982.

[13] Article 16(g) of the Convention provides that Parties shall, as appropriate, and "subject to their respective national legislation and/or policies, exchange information on local and traditional knowledge, ensuring adequate protection for it and providing appropriate return from the benefits derived from it, on an equitable basis and on mutually agreed terms, to the local populations concerned."

Article 17(c) provides that Parties shall support research activities that "protect, integrate, enhance and validate traditional and local knowledge, know-how and practices, ensuring, subject to their respective national legislation and/or policies, that the owners of that knowledge will directly benefit on an equitable basis and on mutually agreed terms from any commercial utilization of it or from any technological development derived from that knowledge."

[14] Representative of the Tulalip Tribe at the Roundtable at the Ethnic Cultural Center of the University of Washington, Seattle, WA, November 20, 1998.

[15] Participant at the Roundtable at the Ethnic Cultural Center of the University of Washington, Seattle, WA, November 20, 1998.

[16] Category I lands are for the exclusive use and benefit of Aboriginal people. Category II lands belong to the province, but Native governments share management for hunting, fishing and trapping, tourism development and forestry. Native people have exclusive hunting, fishing and trapping rights on these lands.

Category III lands are a special type of Quebec public lands. Both Native and non-Native people may hunt and fish here subject to regulations adopted in accordance with the agreements. Aboriginal groups have exclusive rights to harvest certain aquatic species and fur-bearing mammals and to participate in the administration and development of the land.

[17] Participant at the Roundtable on IP and TK at the Grand Council of the Crees, Montreal, November 30, 1998.

[18] Ibid., Montreal, November 30, 1998.

[19] A taliman is the head of a trap line. Traplines were established recently, whereas before the Creeroamed freely.

[20] Participant at the Roundtable on IP and TK at the Grand Council of the Crees, Montreal, November 30, 1998.

[21] Cree representatives at the Roundtable on IP and TK at the Grand Council of the Crees, Montreal, November 30, 1998.

[22] Participant at the Open Roundtable on Aboriginal Intellectual Property at UBC, Vancouver, November 23, 1998.

[23] Ibid

[24] The Nunavut Environmental Database (NED) is available online via the Internet at <http://136.159.147.171/ned/>.

[25] Participants at the meeting with representatives of the Bloodtribe, Glenbow Museum, Calgary, November 24, 1998.

[26] Participants at the meeting with representatives of the Bloodtribe, Glenbow Museum, Calgary, November 24, 1998.

[27] Article 39.2, TRIPS Agreement.

[28] Article 39.2, TRIPS Agreement.

[29] Participants recalled that "[w]hen the hydrodam came in, TEK was harvested from the Cree. Now a non-Cree person is an expert in fish. He came to us and wanted to know where fish go up the rapids to spawn. He then made more than 50,000 Canadian Dollars with that information." Ibid., Montreal, November 30, 1998.

[30] Participants recounted that "The pilot project to document the TEK resulted in a map on which all the TEK was inscribed and the map was then validated by the Taliman. ... Much of their knowledge which was on the maps was secret and the Cree felt that they could not publish it. They asked the Taliman, which information was confidential and which not. The Taliman thought about it and all the information except the non-localizable was removed from the map. The maps that were finally published are ghosts of the real map." Ibid., Montreal, November 30, 1998.

[31] See, RIN 0651-AB02, *Official Gazette* of the USPTO, January 19, 1999.

[32] Report on the Official Insignia of Native American Tribes, USPTO, September 30, 1999: p. 47.

[33] Ibid., p.24.

[34] Participant at the at the Open Roundtable on Aboriginal Intellectual Property at UBC, Vancouver, November 23, 1998.

[35] Meeting with representatives of the Mohawk Nation, Kanien'kehaka Raotitiohkwa Cultural Center, Kahnawake, November 30, 1998.

[36] Roundtable in Iqualuit, November 29, 1998.

[37] Mohawk artist who participated at the meeting with representatives of the Mohawk Nation, Kanien'kehaka Raotitiohkwa Cultural Center, Kahnawake, November 30, 1998.

[38] Cree representatives at the Roundtable on IP and TK at the Grand Council of the Crees, Montreal, November 30, 1998.

[39] Ibid., Montreal, November 30, 1998.

[40] Written comments, dated July 21, 2000, received from Prof. Russell Barsh, Associate Professor, The University of Lethbridge, Lethbridge, Canada, and Engelberg Center for Innovation Law, Institute of Law and Society, New York University, New York, USA.

[41] Participants in the the Open Roundtable at Wanuskewin Heritage Park, Saskatoon, Sasketchuan, November 25, 1998.

[42] Representative of the Tulalip Tribe at the Roundtable at the Ethnic Cultural Center of the University of Washington, Seattle, WA, November 20, 1998.

[43] Participants at the Open Roundtable at Wanuskewin Heritage Park, Saskatoon, Sasketchuan, November 25, 1998.

[44] Elders of the Bloodtribe during a meeting at the Glenbow Museum, Calgary, November 24, 1998.

[45] Ibid., Glenbow Museum, Calgary, November 24, 1998.

[46] Participants at the Sixth Annual Tribal Environmental Protection Agency Conference, San Francisco, Novemver 19, 1998, and Drescher, Thomas, and Candace S. Greene. "The Tipi with Battle Pictures: The Kiowa Tradition of Intangible Property Rights." *Trademark Reporter* 84.4 (1994): 418-433.

[47] Participants at the Open Roundtable on Aboriginal Intellectual Property at UBC, Vancouver, November 23, 1998. An other participant of this Roundtable noted with regard to this statement that not every First Nation uses the term 'potlatch': "In the Nisga'a nation, we generally use the term 'feast' and 'stone-moving feast' when the feast is tied to transfer of title or names. It is only at a stone-moving feast (the grave stone has now replaced the totem pole) that Nisga'a names get passed on." (Letter with comments on a draft of this chapter, received from Mrs. Nita Morven, Researcher, Nisga'a Tribal Council, on July 28, 2000).

[48] Participants at the Open Roundtable at Wanuskewin Heritage Park, Saskatoon, Sasketchuan, November 25, 1998.

[49] Participants at a Meeting held in Minneapolis, Minnesota, November 16, 1998.

[50] Participants at the meeting with representatives of the Mohawk Nation, Kanien'kehaka Raotitiohkwa Cultural Center, Kahnawake, November 30, 1998.

[51] Participants at the Open Roundtable on Aboriginal Intellectual Property at UBC, Vancouver, November 23, 1998.

[52] Participant at the Roundtable on IP and TK at the Grand Council of the Crees, Montreal, November 30, 1998.

[53] Participants at the Sixth Annual Tribal Environmental Protection Agency Conference, San Francisco, November 19, 1998. Reference was made in particular to US patent 5,397,696 on 'Papua New Guinea human T-lymphotropic virus' by participants at a Meeting in Minneapolis, Minnesota, November 16, 1998, and a meeting with representatives of the Bloodtribe, Glenbow Museum, Calgary, November 24, 1998.

[54] Participants of the Open Roundtable at Wanuskewin Heritage Park, Saskatoon, Sasketchuan, November 25, 1998.

[55] Participant at the at the Open Roundtable on Aboriginal Intellectual Property at UBC, Vancouver, November 23, 1998.

[56] Participants at the meeting with representatives of the Mohawk Nation, Kanien'kehaka Raotitiohkwa Cultural Center, Kahnawake, November 30, 1998.

[57] Participants at a discussion at the British Columbia Museum of Anthropology, Vancouver, November 23, 1998, and participants at the meeting with representatives of the Bloodtribe, Glenbow Museum, Calgary, November 24, 1998.

[58] Native American Graves Protection and Repatriation Act, 25 U.S.C. 3001 et seq. [Nov. 16, 1990].

[59] Participant of Roundtable at the Ethnic Cultural Center of the University of Washington, Seattle, WA, November 20, 1998.

[60] Participants of the Open Roundtable at Wanuskewin Heritage Park, Saskatoon, Sasketchuan, November 25, 1998: "I am saying it now: Canada is violating our rights daily. Will you dare quote me?"

[61] Participants at the Roundtable on Traditional Knowledge and Intellectual Property Rights at the Arctic Institute of North America of the University of Calgary, Calgary, November 24, 1998.

[62] Participants of the Government/Indigenous Working Group of Article 8(j) of the Convention on Biological Diversity, Canadian Museum of Nature, Ottawa, November 26, 1998.

[63] Participants of the Open Roundtable at Wanuskewin Heritage Park, Saskatoon, Sasketchuan, November 25, 1998.

[64] Participants of the Open Roundtable at Wanuskewin Heritage Park, Saskatoon, Sasketchuan, November 25, 1998.

FFM to Central America

Box 1. Central America FFM: Country Membership in international IP treaties.

International IP treaties	Guatemala	Panama
Paris Convention	1998	1996
Berne Convention	1997	1996
Rome Convention	1977	1983
Madrid Agreement	-	-
The Hague Agreement	-	-
PCT	-	-
UPOV Convention	-	1999
TRIPS Agreement	2000	2000

Box 2. Central America FFM: Country Membership in TK-related treaties and processes.

TK-related treaty/process	Guatemala	Panama
UNESCO Heritage Conv.	1979	1978
UNESCO Cul. Property	1985	1973
ILO 169	1996	
IUPGR – FAO	1945	1945
CBD	1995	1995
UNCCD	1998	1996

The FFM to Central America took place from January 17 to 22, 1999. The mission visited Tecpán and Guatemala City in Guatemala, and Panama City and Akwa-Yala in Panamá. The Interim Mission Report, which contains information as to the persons and entities with whom WIPO consulted, is set out in Annex 4.

The information in this section is presented under the following headings: Terminology and Subject Matter; Objectives of TK Protection; Documentation; Means of Protecting TK; and Management and Enforcement of Rights and Interests in TK.

Terminology and Subject Matter

Informants interviewed from indigenous communities in both Guatemala and Panama, recurrently referred to the indigenous peoples' vision of the cosmos ("*cosmovisión*") and the spirituality inherent in their way of life and in their manner of relating to nature. Informants believe that "outsiders" need to understand the philosophical principles of indigenous communities before attempting to understand details of current customs, TK, ceremonies and expressions of art, and to explore ways of protecting them.[1]

Expressions that other cultures might perceive as art, "folklore" or handicraft are actually a community's way of performing vital social functions, such as asserting and maintaining their cultural identity, transmitting their culture, and perpetuating their traditions, all within their own cosmology.[2]

In Guatemala, it was noted that indigenous communities have - since pre-Hispanic times - already attained and maintained sustainability in their administration of justice, health and healing, and education systems. To a large extent, that balance has been upset by modern cultural influences and pressure, to the point that survival of those traditions and culture is now gravely endangered. Concern was expressed that traditional indigenous culture would ultimately be destroyed, before any of the teachings of that culture have been assimilated by the "foreign" cultures.[3]

A further twist in this process, informants advised, is that indigenous cosmology has been for the most part systematically misinterpreted and misrepresented, which has generated a "stereotype" of the indigenous people. This in turn has given rise to racism and ultimately further discrimination and misunderstanding of indigenous culture. The example was given that in Mayan tradition bathing in tubs or showering in running water is unusual since traditional bathing is done by *temazcal*, a sort of vapor bath taken in igloo-style stone structures. However, that different tradition has given rise to the belief that native Mayas do not have a habit of cleanliness.[4]

IP Needs and Expectations # 1
An understanding of the visions, customs and spirituality of indigenous communities

IP Needs and Expectations # 2
Clarity on what is meant by TK for IP purposes

Regarding subject matter for TK protection, informants referred to various forms of TK and expressed the need for clarity on what is meant by TK. Particular reference was made to:

- oral and literary works;
- music;
- traditional handicrafts,
- textile designs and patterns;
- traditional medicine;
- traditional food recipes and dishes;
- traditional ceremonies; and,
- the use of local traditional fragrances, e.g. incense.[5]

Objectives of TK Protection

Indigenous informants interviewed were consistent in stating their peoples' fundamental willingness to share their knowledge and their culture.[6] Sharing is an underlying principle in their communities, essential to their thinking and practices, and is consistent with their philosophy and cosmology.[7] Concern was expressed, however, that this openness is all too often abused to the detriment of the holders of that knowledge, especially as regards recognition of the source of the knowledge, works and other products of their culture. In this connection, the issue of ultimate control, use or exploitation of such knowledge and expressions, and the concomitant question of benefit-sharing, were also mentioned as objectives of TK protection. These matters are perceived by persons consulted as directly related to a question of fundamental justice.[8]

Some respondents indicated preoccupation at what they perceive as a loss of spiritual values by the indigenous communities, particularly under the influence of "modern" civilization and increased exposure of the younger generations to trends imported from "the city" or from abroad. Economic pressure and the need to pay for basic needs are effectively forcing members of indigenous communities, sometimes high-ranking authorities thereof, to "sell" their spiritual heritage, TK and cultural expressions in exchange for monetary remuneration or other compensation in kind.

The purchasers of indigenous cultural expressions are typically not related to the communities themselves. Therefore such "selling" of communal spirituality generally benefits persons that have little interest in preserving the original culture, but who are in the market for the spoils, WIPO was told. For example, outsiders would fake and offer "Mayan horoscopes" as a commercial activity, generally duping their clients. Elders in a communal context do not charge for preparing horoscopes, since that is one of their traditional functions within the community.[9]

This problem provoked varying reactions from the respondents from indigenous communities. Some denounce such situation as a self-inflicted prejudice, because it is the members of the communities themselves who "sell out" their spiritual values, knowledge and information, without informing the purchaser of the spiritual value of the information, nor requesting or obtaining any assurances that the information will not be exploited as a commercial commodity.[10] Others believe that traditional communities should not follow the steps of other cultures that have lost their spiritual values and "commoditized" their cultural expressions. Rather, indigenous communities can teach other cultures the importance of spiritual values. Seemingly, the need for such values is now felt by members of other cultures; hence the surge of visitors who wish to learn and copy traditional indigenous rites, ceremonies and healing methods. That heritage could be shared, but it has to be protected from usurpation.[11]

IP NEEDS AND EXPECTATIONS # 3

Acknowledgement of source of TK-based creations and innovations, and the control of their use and exploitation of TK and benefit sharing

IP NEEDS AND EXPECTATIONS #4

Adoption of measures, nationally and internationally, to curb the "piracy" and unauthorized copying and utilization of traditional cultural expressions

Many informants argue strongly for the need to take measures against the growing threat to indigenous culture posed by the indiscriminate copying, misappropriation or "piracy" of indigenous cultural expressions, practices, works, TK and a variety of undisclosed information. The manner in which that copying occurs is regarded as especially deleterious on at least three counts:

- it denies the authors and communities of origin of their moral rights to recognition and credit of authorship and ownership;
- this in turn prevents the communities from exercising any effective control over the way their works and cultural expressions are reproduced and commercialized, effectively depriving them from the possibility of deriving any economic benefits, should they wish to; and,
- finally, those who copy the works generally disregard the meaning and spiritual value that such works have for the community of origin. This is resented as highly disrespectful to their culture, and dangerous to the survival of the original, genuine traditions, which could disappear in the wake of unauthorized commercial copying.[12]

Copying and "piracy" were denounced by informants in respect of different kinds of works and cultural expressions, but especially regarding oral and literary works, music, traditional handicrafts, textile designs and patterns, and in the area of traditional medicine. However, copying is also resented in respect of a variety of other expressions, including traditional food recipes and dishes, traditional ceremonies, and the use of local traditional fragrances, e.g. incense.[13] The plagiarizing of traditional spiritual and religious ceremonies is felt to be particularly offensive. A growing number of "foreign" persons were reported to arrive in the native communities to learn the rites and gestures of traditional Mayan ceremonies, but they failed to comprehend the underlying spiritual meaning thereof. Those persons subsequently return to their places of provenance and perform pastiche or fake ceremonies that only mimic the original version.[14]

Oral and literary works: Plagiarism of traditional oral works, including traditional legends, myths, stories, poems and other oral traditions was noted especially in Guatemala. The richness of the Mayan culture has of late been recognized and apprized. The rich oral traditions kept by the elders in various communities are being collected and documented.[15] However, those oral works are often compiled by persons alien to the communities of origin, who then edit and publish them without either indicating the source or recognizing any rights on behalf of the authors or communities of origin.[16] Usually, the persons gleaning the information from the communities do not properly obtain prior consent.[17]

IP NEEDS AND EXPECTATIONS #5
Recognition of traditional cultural expressions and other forms of TK as objects of IP protection

It was explained that in the Mayan world, oral traditions are in the public domain; they belong to the community as collective property. In different Mayan communities the myths, legends and oral traditions could have the same substance and meaning, but the manner in which they are told and transmitted could vary. Oral tradition has a primary social function, namely, preserving the history of the community and the Mayan people as a whole. They were not created to fulfil an aesthetic function, but rather have an historic, functional purpose. Oral traditions are a community's historical record, and even function as a means of collective survival, for example oral traditions that record the manner in which epidemics arrived in the past or could be contained in the future. The process of extracting those traditions from their original community and transposing them to the "western" world without fully understanding their meaning and purpose, erodes and ultimately destroys them. This debases the communities' culture.[18]

The problem is aggravated by the inputs of the compilers and editors, who often unscrupulously transform, abridge or mutilate the legends, myths, stories and poems to suit perceived market preferences, disregarding the need to preserve the original traditions intact. It is unfortunate that publications of Mayan oral traditions fail to interpret and transmit them truthfully, mostly as a result of ignorance or economic interest prevailing over social responsibility. For example, informants believe that few editors know (or care) about the meaning of the number seven in oral tradition, or the meaning of the color red in a textile design. It is felt that indigenous communities have a moral right to their traditions, and that the law should recognize this.[19]

Music and other traditional arts and handicrafts: Both in Guatemala and Panama the problem caused by the "piracy" of expressions of traditional arts and handicrafts was mentioned. This seems to be caused particularly by unclear regulation and gaps in IP law.[20]

In respect of music, concern was expressed that traditional musical expressions, as well as traditional instruments, tended to disappear, or evolve under foreign influence. A similar problem was evident in respect of traditional dances. The younger generations are drifting away from traditional expressions of music and dance. The question was raised as to whether anything could be done to prevent the erosion of traditional music and dances in the region. Dedicated funds and special regional encounters and festivals were thought to help in this respect.[21] However, it was also acknowledged that local communities could contribute cultural innovations which, in turn, are taken up by communities in foreign countries. An example in instance was the "steelpan", a metal musical instrument created by the Afro-Antillean communities in Panama and the Caribbean, and now widely used in the region.[22]

Textile and other product designs: A need to improve the protection of traditional designs of textile and similar products was strongly felt both in Guatemala and Panama. The Guatemalan authorities have denounced, in international fora and elsewhere, practices by individuals and enterprises, generally foreign operators, that systematically copy the different textile designs of the various Mayan communities in the country to produce copies and imitations industrially. Such industries have been found to operate from, among other places, Mexico, the United States of America and Japan.[23] It was noted that in the traditional native communities, weaving and textile techniques are transmitted from mother to daughter, and that there are initiation rites that the outsiders circumvent when they install themselves in those communities to learn those traditional skills. The process of copying is generally preceded by one or more visits of outsiders to the local indigenous communities to "learn" the traditional weaving techniques and copy the traditional designs and patterns. Those persons subsequently leave without providing any information on the purpose of their learning, and without seeking prior informed consent or concluding any agreement.

The imitation of traditional textile designs causes the communities not only economic prejudice, but also seriously erodes and threatens to ultimately destroy the already endangered traditional textile and weaving crafts. Textile designs reflect the spirituality and the individual feelings of the weaver or artisan. For example, each Mayan "huipil"[24] or other typical garment has a meaning, comprising historical symbolism. A person not belonging to a particular Mayan community is not worthy of wearing garments produced by that community with that community's designs and patterns, because the foreigner does not belong to the community's tradition and does not participate in its history.[25]

Two other factors were mentioned that seemed to endanger traditional designs, namely transculturization and market pressure. Some respondents mentioned that normal contacts between different communities of neighboring countries causes traits and features typical of foreign designs to cross over into the local designs. This tends to dilute or transform the original designs and styles, which could eventually disappear.[26] On the other hand, market pressure from certain sectors of local consumers and from foreign tourists induce native communities to manufacture products with specified designs. In some cases, communities are required to copy designs pertaining to other communities, or to distort the original designs to satisfy different tastes.[27]

Traditional medicine: Preservation of traditional medicine is seen as a prime objective of TK protection. Traditional medicine and healing is practiced in indigenous communities both in Guatemala and Panama. The skills and techniques of healing are transmitted orally, through an initiation process that can start early in life. That knowledge is not supposed to be revealed or transmitted in exchange for money.[28]

Much of the knowledge is acquired empirically, and traditional medicines are generally not recognized by the national health system. Obtaining regulatory approval for traditional medicines is, in the best of cases, prohibitively onerous.[29] There are few indigenous entrepreneurial organizations in these countries, and the holders and practitioners of traditional healing knowledge are not organized commercially. They know little of IP, and could benefit from information and awareness programs in this field.[30] Efforts are being made to produce traditional medicines in a more organized manner, and traditional healers have set up organizations to represent them. It was also proposed that traditional medicine be further disseminated through expanded educational programs.[31]

Traditional medicinal knowledge is threatened on two fronts. Domestically, traditional healers are concerned by the activities of undisciplined healers who, in exchange for economic consideration, will "graduate" new healers violating or circumventing the traditional rites and processes of initiation.[32] On the other hand, "outsiders" coming from "the city" or from foreign countries to learn or otherwise obtain information from traditional healers pose a further problem. Information is sought both in respect of healing secrets and skills, and in respect of the use of natural substances for therapeutical purposes, including medicinal plants. Healers are generally reluctant to part with information which is sacred to them, and which has been painstakingly compiled and developed over generations.[33]

Expeditions by ethnobotanists and other scientists have started to be regarded with suspicion, because community members are not involved in, nor informed of, the subsequent use of the information and biological material supplied by them. It is believed that if new products were to be developed or new scientific publications issued on the basis of that information, the communities of origin would probably never be informed, and would in all likelihood not participate in any economic benefits deriving therefrom.[34]

Documentation

Efforts have been made to record and document certain expressions of traditional culture and folklore. In **Guatemala**, a **Registry of Archaeological, Historical and Artistic Property** has been in operation since 1954, and its importance has grown in recent times. Its purpose is to record and thus maintain information on the historical origin, meaning and features of cultural expressions. The Registry records not only artifacts, monuments and other tangible objects of the national cultural heritage (including all pre-Hispanic, Mayan objects), but also intangible expressions of national culture such as traditional *fiestas*, oral traditions and legends. In **Guatemala**, the latter were being compiled and documented in particular by the ***Centro de Estudios Folclóricos*** of the ***Universidad de San Carlos***.[35]

For example, the giant kites built and flown at the traditional festivities in San Juan Zacatepequez on All Saints Day are believed to establish a contact between the living (on the ground) and the spirits of the dead (in the sky). That tradition had been recorded as part of Guatemala's cultural heritage. Musical instruments, such as the traditional *marimba* (a large xylophone-type instrument), are also recorded if they comply with the established standards and requirements.[36]

A similar experience was found in **Panama,** where a **National Cultural Property System (*Sistema Nacional de Bienes Culturales*)** has been established. Its purpose is to compile and document all national cultural expressions, including "living cultural heritage". Both tangible and intangible expressions are recorded including, for example, works of fine arts, musical compositions, dramatic works, as well as the individual creators of those works.[37]

Activity by the private sector was also found in this connection. For example, a unique collection of typical Panamanian dresses and attires has been maintained by private effort, and some form of public support is now being sought to continue the work.[38] In Guatemala a printing house is eager to publish books on traditional and pre-Hispanic Mayan objects and writings, including those found in foreign museums, although this project had encountered some difficulty in accessing Mayan artifacts kept in those museums.[39] On the other hand, the ***Fondo de Desarrollo del Indígena Guatemalteco* (FODIGUA) (Fund for the Development of Guatemalan Indigenous Peoples** supports and finances projects to edit and publish books relating to the Mayan traditions and culture, including traditional legends and dictionaries of local dialects.[40]

Means of Protecting TK

Use of intellectual property

IP NEEDS AND EXPECTATIONS #6
A single forum enabling discussion of TK protection among TK holders, Government officials, academics and other relevant organizations

A number of respondents acknowledged that a proper forum for the discussion of the issues relating to the protection of TK, bringing together TK holders, the government, academia and other relevant organizations was necessary and had yet to be organized.[41]

However, the question of the suitability of IP as a means for protecting TK was brought up on several occasions. For instance, in respect of expressions of folklore and traditional arts, these could be regarded as an anthropological expression of a particular culture or people. Folklore was seen as the living experience of a community that chose a variety of collective expressions to reflect its feelings and approach to life. Cultural expressions of folklore could be expressed by modern means. That should not be taken as a distortion of traditional expressions, but as adjustment of traditional expressions to modern times.[42]

Some respondents indicated that **copyright law** did not seem adequate to provide the required protection. However, that left artisans and traditional crafters with unfulfilled expectations regarding the protection of their works. Seemingly, a new type of ***sui generis* right** would have to be created and recognized for that purpose. Other respondents believed that copyright law could be applied if some adjustments were made, including a broadening of the definition of "work". Moreover, since it was clear that handicraft products were works, they ought to be protected fully under copyright. That would go a long way towards meeting the demand for protection raised by traditional artists and craftsmen.[43] Interest was expressed in testing the usefulness in TK protection of copyright, industrial designs, geographical indications and other IP tools. Technical studies of specific concrete cases were suggested.

PANAMA: THE TRADITIONAL "MOLA"

In Panama, the main point of concern regarding textile designs was the protection of the traditional "mola", produced by the native **Kuna communities.** The "mola" is a traditional handmade textile work manufactured by cutting and stitching several layers of cloth to form a multicolored, highly decorative product. Molas may be applied to a variety of products as surface decoration, including all sort of wearing apparel, leather goods, headwear, accessories, etc. They are also traded as works of pictorial art, to be exhibited as such. Each "mola" is an original work, individually made by the crafter, generally a native woman. A law was enacted in 1984 to repress the counterfeiting of molas. This was regarded as urgent, since mola crafting was the livelihood of the native Kuna communities in Panama. Examples of copying abounded. For instance, it was reported that fake molas made in Japan were on sale in shops in New York; imitation molas made industrially in Taiwan had been seized on importation into Panama. A more complex problem was caused by the production of molas by the (smaller) Kuna community living in neighboring Costa Rica, who had started promoting their products in competition with the original Panamanian molas. Since 1990, government authorities in Panama had held consultations with the native Kuna communities to find ways and means to protect the molas from unauthorized copying. Among the possible approaches envisaged, copyright and industrial design protection had been considered, as well as geographical indication (or appellation of origin) protection for the traditional appellation "mola".*

* *Meeting with government authorities, representatives of the Sociedad de Amigos del Musio de Arte Afroantillano (SAMAAP) (Society of Friends of the Afro-Antillean Museum of Art), and representatives of the Kuna community, Panama, January 21, 1999.*

Customary law and practice

Customary law is also a factor to be taken into account with a view to analyzing the applicability of the standard IP system in the countries surveyed. The IP system is regarded as part of the "western", modern system of law, and is not readily understood by indigenous peoples that live by the principles and rules of their own customary law. IP law could be received with suspicion, as are other institutions brought in the past into the region from abroad and imposed on the native communities. It is felt that a policy of broader information dissemination and awareness about IP ought to be implemented among those communities, before they could be expected to participate more fully in the IP system.[44] For example, a number of studies had been concluded recently by the *Instituto de Investigaciones Económicas y Sociales* (IDIES) of the *Universidad Rafael Landivar* in Guatemala, in connection with Mayan customary law.[45]

Access to genetic resources

Respondents linked the protection of TK to the issues of access to and use of genetic and biological resources. In Guatemala and Panama, authorities and legislation to protect the environment have been established,[46] but government authorities believe they still need to put together a national strategy in respect of biodiversity. They still have to address weaknesses in biosecurity, bioprospecting and the IP aspects of TK protection. Perhaps a system for access to genetic resources could be set up that would involve the native communities, the government and third parties interested in those resources.[47]

131

Indigenous communities have a direct, intimate relationship with their land and their natural environment. Flora and fauna living on their lands are not regarded as "resources", but as their home, the habitat on which their lives depend. That makes indigenous peoples inherently conservationist; they recognize the spiritual value of all life forms and possess the ancestral knowledge to preserve their natural environment. Those communities have lived a history of struggle to maintain possession and legal title over their lands, and they tend to feel threatened by any poaching activities or other encroachment, including attempts to access their genetic or biological resources.[48]

IP Needs and Expectations #7
Testing the usefulness of the IP system in protecting TK through technical, concrete case studies

IP Needs and Expectations #8
Greater awareness-raising and information on the IP system in general amongst indigenous and local communities

IP Needs and Expectations #9
Information and advice on the IP aspects of access to and benefit sharing in genetic resources

Native communities possess biological and genetic resources on their lands, including many medicinal plants. They have ambivalent feelings as to the way they should administer that wealth. On one hand, they are prepared to part with their resources and the information about their healing properties; on the other hand, they cannot accept to lose control over the management of those resources, nor to transfer material or knowledge without full information as to the purpose of the transfer and the commercial implications thereof. Some informants indicated that the communities' preference would be to retain full control of any use or exploitation of their natural resources. They do not wish to be confined to the role of mere purveyors of resources and know-how for the benefit of commercial interests in which they would have no participation and that would not share their knowledge or their economic benefits with the communities.[49]

It was stated that most multinational corporations that are active in prospecting and collecting biological material such as plants-with or without the concomitant traditional medicinal knowledge-are generally not seeking to trade with the plants themselves, but to identify potentially useful naturally-occurring molecules that could subsequently be synthesized for industrial production. On the basis of a single natural molecule, hundreds of derived molecules could be synthesized and screened for biological activity (pharmaceutical, agrochemical, and so on.). If some sort of material transfer agreement (MTA) or benefit sharing arrangement were concluded in that connection, the question remains as to whether those synthesized molecules could or would be regarded as derived from the natural molecule, in order that the benefit-sharing link can be established.[50]

It was noted in this respect that such *modus operandi* could mean that technological developments (and the investment therefor) would normally not take place in the country of prospecting and extraction of the biological material, but abroad where the analysis and development activities are performed.[51]

Management and Enforcement of Rights and Interests in TK

Legislation relating to traditional artisans and handcrafters was found both in Guatemala and in Panama.

- In **Guatemala,** a law was enacted in 1996 for the Protection and Development of Artisans, which established a registry of artisans. The government is also implementing programs aimed at encouraging handicraft and traditional artisans wishing to organize their activities as small or medium enterprises.[52]
- In **Panama,** a law was enacted in 1997 to protect artisans and handcrafters. It provides, in particular, that the importation of articles that copy or imitate Panamanian handicraft is prohibited. Some informants stated, however, that those provisions are not being properly enforced, to the detriment of local artisans.[53]

In respect of IP, it was felt that indigenous communities have not been active in using the IP system, even where available to protect certain works. The need to identify which forms of TK are already protected by the

IP system was noted. It was felt there is still room for more assertive action on the side of the native communities to use the system to their advantage. It was pointed out that, under national law, indigenous communities as such have legal standing, and are therefore entitled to own IP rights as collective entities.[54] On the other hand, it was noted that indigenous communities had insufficient resources to acquire and enforce legal protection for their TK, and to exploit commercially the expressions of that knowledge. Part of the problem stemmed from the fact that the idea of commercializing their culture or the tangible expressions thereof was often alien to indigenous cultures.[55]

Interest in learning more about ways and means of using IP to further their development was found among indigenous grass-roots organizations in Guatemala. Several examples of different organizational approaches were mentioned:

- The ***Defensoría Maya*** has started to channel international cooperation funds to a project aimed at setting up a trading corporation that would facilitate the export and distribution of products from the Mayan communities in Guatemala.[56]
- On a different front, the ***Red Empresarial Indígena de Guatemala*** **(Indigenous Entrepreneurial Network of Guatemala)** has recently been established to organize individual traders and small and medium indigenous commercial entities with a view to improve their standing and efficiency in the marketplace.[57]
- Another institution, the ***Consejo de Organizaciones Mayas de Guatemala*** **(Council of Mayan Organizations of Guatemala) (COMG),** has some 14 associate members, organized to pursue a variety of objectives of interest to the Mayan communities. Its members are specialized in several areas, including institutional strengthening, indigenous law and rights, and human development. For example, the ***Centro de Investigación Maya*** **(CEDIM) (Mayan Research Center)**, one of the member organizations of COMG, specializes in projects relating to education, cultural research and academic development. Another member established recently is the ***Cámara de Comerciantes Mayas*** **(Chamber of Mayan Traders)**, which has over 80 members. COMG aims at improving IP protection in three specific areas, namely: cultural rights (including native languages and linguistic expression, oral traditions, etc.); traditional science and technology (including traditional medicine, medicinal plant identification, astronomy, land use and conservation, and organizational models); and indigenous arts (including textile and wearing apparel designs, music and handicraft products).[58]
- Another experience was the ***Fondo de Desarrollo del Indígena Guatemalteco*** **(FODIGUA) (Fund for the Development of Guatemalan Indigenous Peoples),** established as a fund aimed at promoting the integral, sustainable development of indigenous communities in Guatemala. FODIGUA is able to finance projects in a variety of areas, including health, education, environment and institution building.[59] The patenting of inventions or other legal protection of IP could be envisaged under FODIGUA-financed projects. FODIGUA favors the development and use of appropriate, environmentally friendly technology, as well as soil and environment conservation practices. Those factors are taken into consideration to approve financial assistance for development projects.

IP NEEDS AND EXPECTATIONS #10
Identifying TK already protected by the IP system

IP NEEDS AND EXPECTATIONS #11
Strengthening the ability of indigenous communities to acquire, manage and enforce IP rights

IP NEEDS AND EXPECTATIONS #12
Tools or methods to protect collectively owned rights, using *inter alia* lessons learned from the collective management of IPRs

IP NEEDS AND EXPECTATIONS #13
Awareness raising and training for indigenous communities and the relevant Government officials on the use of IP to protect TK

Several informants underscored the real or perceived difficulty in obtaining formal IP protection, especially for technological innovations and industrial designs, and to enforce IP rights. Most indigenous communities had neither the expertise nor the economic capacity to embark on a full use of the options provided by the industrial property system, within the country or abroad, since procedures were too complicated and expensive. Moreover, the basic issue of collective ownership of IP rights, as managed under the traditional law of many indigenous communities, seemed to complicate matters further.[60] Interest

BEST COPY AVAILABLE

was expressed in learning further about collective management of IP rights, as it was suggested that the latter may provide lessons for collectively owned rights.

The importance of increasing efforts to create awareness of the relevance of IP for the preservation of TK, and focussing more on the holders of such knowledge and the relevant governmental interlocutors, was highlighted in many of the interviews. It was stated that indigenous peoples' organizations needed further information on the nature and usefulness of IP and the specific objects of protection thereunder, and that WIPO should look into activities to that end. Such awareness creation was most needed in respect of works protectible by copyright or by industrial design, and in respect of technology-rich information possessed by traditional communities.[61]

SUMMARY OF INTELLECTUAL PROPERTY NEEDS AND EXPECTATIONS

1. An understanding of the visions, customs and spirituality of indigenous communities
2. Clarity on what is meant by TK for IP purposes
3. Acknowledgement of source of TK based creations and innovations
4. Information and advice on IP-related aspects of the use and exploitation of TK and benefit-sharing arrangements
5. Adoption of measures, nationally and internationally, to curb the "piracy" and unauthorized copying and utilization of traditional cultural expressions
6. Recognition of traditional cultural expressions and other forms of TK as objects of IP protection
7. Establishing a single forum enabling discussion of TK protection among TK holders, Government officials, academics and other relevant organizations
8. Testing the usefulness of the IP system in protecting TK through technical, concrete case studies
9. Greater awareness-raising and information on the IP system in general amongst indigenous and local communities
10. Information and advice on the IP aspects of access to and benefit-sharing in genetic resources
11. Identifying TK already protected by the IP system, or capable of being so protected
12. Strengthening the ability of indigenous and local communities to acquire, manage and enforce IPRs
13. Tools and methods to protect collectively owned rights, using inter alia lessons learned from the collective management of IPRs
14. Awareness raising and training for indigenous communities and relevant Government-officials on the use of IP to protect TK

BEST COPY AVAILABLE

Notes

[1] Meeting with Mrs. Leticia Velásquez de León, Tecpán, Guatemala, January 17, 1999.

[2] *Idem.*

[3] *Idem.*

[4] Meeting with representatives of the *Universidad Rafael Landivar*, Guatemala, January 18, 1999.

[5] Meeting with Mrs. Leticia Velásquez de León; see above.

[6] Meeting with members of the Kuna community in Madugandí, Panama, January 22, 1999.

[7] Meeting with members of the National Council of the *Fondo de Desarrollo del Indígena Guatemalteco* (FODIGUA) (Fund for the Development of Guatemalan Indigenous Peoples), January 19, 1999.

[8] Meeting with Mr. Adrián Ávila and the elders of the Kuna community in Madugandí, Panama, January 22, 1999.

[9] Meeting with Mr. Audelino Sajbin, in Tecpán, Guatemala, on January 17, 1999. Mr. Sajbin is a native Mayan painter and artist.

[10] Meeting with Mr. Eulogio Tamup, in Tecpán, Guatemala, on January 17, 1999. Mr. Tamup, a naturist and traditional Mayan healer, learned his skills from his grandfather, some 45 years ago.

[11] Meeting with Mrs. Leticia Velásquez de León; see above.

[12] Meeting with representatives of the *Universidad Rafael Landivar*, Guatemala, January 18, 1999.

[13] Meeting with Mrs. Leticia Velásquez de León; see above.

[14] Meeting with representatives of the Ministry of Culture, Guatemala, January 18, 1999.

[15] Meeting with Mr. Joaquín Potzán, member of the National Council of FODIGUA; see above.

[16] Meeting with Mrs. Cristal Ruiz, Director, *Instituto de Estudios Interétnicos, Universidad de San Carlos*, Guatemala, January 20, 1999.

[17] Meeting with representatives of the *Fondo de Desarrollo del Indígena Guatemalteco* (FODIGUA) (see above).

[18] Meeting with Mrs. Leticia Velásquez de León; see above.

[19] *Idem.*

[20] Meeting with representatives of the Ministry of Culture and Sports, Guatemala, January 18, 1999, and representatives of the Kuna community, Panama, January 21, 1999.

[21] Meeting with representatives of the *Sociedad Panameña de Autores y Compositores* (SPAC) (Panamanian Authors and Composers Association), and with Panamanian artists and folklorists, Panama, January 21, 1999.

[22] Meeting with representatives of the *Sociedad de Amigos del Museo de Arte Afroantillano* (SAMAAP) (Society of Friends of the Afro-Antillean Museum of Art), Panama, January 21, 1999.

[23] Meeting with representatives of the Ministry of Culture of Guatemala, January 18, 1999.

[24] A "*huipil*" is a typical loose-fitting, sleeve-less blouse or shirt worn by Mayan natives. Its front and back are woven in a variety of patterns and colors depending on the region and community of origin.

[25] Meetings with representatives of the *Universidad Rafael Landivar*, Guatemala, on January 18, 1999, and of the *Fondo de Desarrollo del Indígena Guatemalteco* (FODIGUA) (Fund for the Development of Guatemalan Indigenous Peoples), January 19, 1999.

[26] Meeting with representatives of the *Asociación de Investigaciones y Estudios Sociales* (ASIES) (Association for Social Research and Studies), Guatemala, January 20, 1999.

[27] Meeting with Mrs. Cristal Ruiz, Director, Institute for Inter-Ethnic Studies, *Universidad de San Carlos*, Guatemala, January 20, 1999.

[28] For example, Mrs. Leticia Velásquez de León (met in Tecpán (Guatemala) on January 17, 1999) is an *ajq'ij* (in Maya tradition, a visionary of time and the future), as well as a graduated medical doctor and a traditional healer. She was initiated in the art of traditional healing at the age of 13. She specializes in women's ailments, obstetrics and psychological illnesses, and uses certain natural substances to perform her cures.

[29] Meetings with Mrs. Velásquez (see above) and with Mr. Eulogio Tamup, in Tecpán, Guatemala, January 17, 1999 (see above).

[30] Meeting with members of the National Council of the *Fondo de Desarrollo del Indígena Guatemalteco* (FODIGUA) January 19, 1999.

[31] Meetings with members of the National Council of the *Fondo de Desarrollo del Indígena Guatemalteco* (FODIGUA) (Fund for the Development of Guatemalan Indigenous Peoples), January 19, 1999, and with Mr. Eulogio Tamup (see above). The latter promoted establishment of the *Consejo Nacional de Guías Espirituales de Guatemala* (National Council of Spiritual Guides of Guatemala).

[32] Meeting with Mr. Eulogio Tamup (see above).

[33] Meeting with members of the Kuna community in Madugandí, Panama, on January 22, 1999.

[34] Meetings with members of the Kuna community in Madugandí (see above) and with representatives of the *Coordinadora Nacional de Pueblos Indígenas de Panamá* (COONAPIP) (National Coordination of Indigenous Peoples of Panama), Panama, January 22, 1999.

[35] Meeting with representatives of the Ministry of Culture, Guatemala, January 18, 1999.

[36] *Idem.*

[37] Meeting with authorities of the *Instituto Nacional de Cultura* (INAC) (Panamanian Institute of Culture), Panama, January 21, 1999.

[38] Meeting with representatives of the *Sociedad Panameña de Autores y Compositores* (SPAC) (Panamanian Authors and Composers Association), Panama, January 21, 1999

[39] Meeting with representatives of the *Empresa Editorial "Cholsamaj"*, Guatemala, January 18, 1999.

[40] Meeting with members of the National Council of the *Fondo de Desarrollo del Indígena Guatemalteco* (FODIGUA) (Fund for the Development of Guatemalan Indigenous Peoples), January 19, 1999.

[41] For example, Mr. Carlos Rolz-Asturias, *Instituto de Investigación de la Universidad del Valle*, Guatemala, January 18, 1999.

[42] Meeting with representatives of the *Instituto Panameño del Derecho de Autor* (IPDA) (Panamanian Copyright Institute), Panama, January 21, 1999.

[43] *Idem*

[44] Meeting with representatives of ASIES, Guatemala, January 19, 1999 (see above).

[45] See, in particular, the publications *"Aproximación al sistema jurídico maya"*, *"Los procedimientos jurídicos en las comunidades mayas actuales"*, *"La relación de las comunidades mayas actuales con el sistema oficial de justicia"*, and *"Las normas jurídicas en las comunidades mayas actuales"*, form the series *Reflexiones Jurídicas* published in 1998 by the *Instituto de Investigaciones Económicas y Sociales* (IDIES) of the *Universidad Rafael Landivar*, in Guatemala.

[46] In Guatemala the *Comisión Nacional del Medio Ambiente* (CONAMA) (Notional Commission for the Environment) had been established, and in Panama the *Ley General del Ambiente* (No. 41) of June 1, 1998, had been enacted.

[47] Meeting with government authorities in Panama, January 21, 1999.

[48] Meeting with members of the Kuna community in Madugandí (see above).

[49] Meetings with members of the Kuna community in Madugandí (see above) and with representatives of the *Coordinadora Nacional de Pueblos Indígenas de Panamá* (COONAPIP) (National Coordination of Indigenous Peoples of Panama), Panama, January 22, 1999.

[50] Meeting with Mr. Carlos Rolz-Asturias, *Instituto de Investigación de la Universidad del Valle*, Guatemala, January 18, 1999.

[51] *Idem*.

[52] Interview with Mrs. Edith Flores, Vice-Minister for Economy of Guatemala, Guatemala, January 18, 1999.

[53] Meeting with representatives of the Kuna community, Panama, January 21, 1999.

[54] Meeting with government authorities, Panama, January 21, 1999.

[55] Meeting with Mr. Carlos Rolz-Asturias (see above).

[56] Meeting with Mr. Juan León, Guatemala, January 19, 1999.

[57] Meeting with Mr. Benjamín González, Tecpán, Guatemala, on January 17, 1999. Mr. González was President of the *Red Empresarial Indígena de Guatemala*.

[58] Meeting with Mr. Victor Paz, *Consejo de Organizaciones Mayas de Guatemala* (Council of Mayan Organizations of Guatemala) (COMG), Guatemala, on January 19, 1999.

[59] Meeting with members of the National Council of the *Fondo de Desarrollo del Indígena Guatemalteco* (FODIGUA) (Fund for the Development of Guatemalan Indigenous Peoples), January 19, 1999.

[60] Meetings with members of FODIGUA (see above), Mr. Victor Paz (COMG) (see above), and members of representatives of the *Sociedad de Amigos del Museo de Arte Afroantillano* (SAMAAP) (Society of Friends of the Afro-Antillean Museum of Art) (see above).

[61] Meetings in Guatemala with Mr. Benjamín González, (in Tecpán), and Mr. Demetrio Rodríguez, January 17 and 19, 1999 (see above); and in Panama with Mr. Adrián Ávila and representatives of the Kuna community, representatives of the *Sociedad Panameña de Autores y Compositores* (SPAC), and government authorities, January 21 and 22, 1999 (see above).

FFM to West Africa

Box 1. FFM to West Africa: Country Membership in international IP treaties

International IP treaties	Nigeria	Ghana	Mali	Senegal
Paris Convention	1963	-	1983	1963
Berne Convention	1993	1991	1962	1962
Rome Convention	1993	-	-	-
Madrid Agreement	-	-	-	-
The Hague Agreement	-	-	-	1984
PCT		1997	1984	1978
UPOV Convention	-	-	-	-
TRIPS Agreement	2000	2000	2006	2000

Box 2. FFM to West Africa: Country Membership in TK-related *Treaties and Processes*

TK-related Treaty/Process	Nigeria	Ghana	Mali	Senegal
UNESCO Heritage Convention	1974	1975	1977	1976
UNESCO Cultural Property	1972	-	1987	1984
ILO 169	-	-	-	-
IUPGR – FAO	No	Yes	Yes	Yes
CBD	1994	1994	1995	1994
UNCCD	1997	1996	1995	1995

The FFM to West Africa took place from January 18 to February 3, 1999. The mission visited the following countries: Nigeria, Ghana, Mali and Senegal. The Interim Mission Report, which contains information as to the persons and entities with whom WIPO consulted is included in Annex 4.

The information in this section is presented under the following headings: Terminology and Subject Matter, Objectives of TK Protection, Benefits and Beneficiaries of Protection, Documentation, Means of Protecting TK, and General.

Terminology and Subject Matter

The question "What is traditional knowledge (TK)?" was raised by informants at most meetings with diverse views offered on what the subject matter includes. It was generally recognized that the region is richly blessed with biodiversity resources and complementing that, that local artists and craftspersons create works which are identifiable only as originating from this region. Artistic and scientific "works" were seen to fall within the TK spectrum. However, traditional medicinal knowledge was almost always the first example of TK cited and in most of the meetings held throughout the mission, it was given more priority than any other form of TK.

In most meetings, a distinction was made between "TK" and "folklore". Both terms were considered "intertwined" including subject matter covering all fields of human endeavor such as plant-derived medicine, arts and crafts.

TK was described as *"knowledge which is handed down informally from generation to generation"*[1]. In another meeting in which folklore was used as the dominant term, the informants' definition followed the artistic leanings of folklore as defined in the 1982 UNESCO-WIPO Model Provisions for National Laws on the Protection of Folklore Against Illicit Exploitation and Other Prejudicial Actions ("the Model Provisions"): *"continuous creations of the people expressed in various art forms."* These "art forms" were then defined to include: folk poetry, folk music, folk tales, folk art, (including drawings, paintings and craftwork) folk dances, medicinal knowledge (including spiritual healing methods), and culinary techniques[2]. The last two items, however, are not included in the subject matter for protection under the Model Provisions. It was suggested at this meeting that a distinction be made between "artistic folklore" which is considered to be more easily identifiable and "material folklore" where technology is involved. Classifying the works into these two groups was expected to determine the type of protection they should be given.

At another meeting, it was suggested that "traditional culture and oral tradition" should replace the term " folklore" as the former is all embracing and takes into account the fact that the knowledge systems and processes are learnt orally[3]. According to TK holders and others consulted, the following are also examples of subject matter to be protected:

- language[4];
- cloth weaving techniques;
- cloth dyeing techniques[5];
- farming and agricultural techniques;
- traditional birthing methods;
- hunting skills;[6]
- food preservation and conservation methods; [7]
- food processing and fermentation technology;
- divine worship and spiritual aspects of healing (which precede the actual administration of some traditional medicines)[8].

From the above, it is apparent that the terms TK and folklore are used by persons consulted with the understanding that they cover both artistic and scientific subject matter.

Objectives of TK Protection

Two main objectives were identified:

- prevention of unlawful use and commercial exploitation of the knowledge on the one hand, and
- preservation and conservation of cultural heritage on the other.

138

As regards the former, it was often emphasized by informants that there has been increased interest in TK, particularly in the medicinal field. They were of the view that traditional practices are the basis for the development of some modern technology although some of them stated that the reality is that modern technology is rapidly overtaking TK with all evidence showing that this trend will continue. As one of the informants stated:

IP NEEDS AND EXPECTATIONS #1
Awareness-raising at the national level of the intellectual property aspects of TK

" The search for alternative ways of doing things and for renewed cultural infusion has led to an increased interest in the cultures of local communities particularly by people from the industrialized countries... (T)he climate for a new relationship with practitioners of "authentic" or "complementary" medicine is based on the world-wide call for "health for all". A large proportion of the population is going for traditional medicine as a first resort and there is a world-wide renaissance for the use of traditional medicine"[9].

The important issue for most of the people with whom WIPO met was the need to protect the knowledge from those who can exploit it for their own benefit, not acknowledging the original owners and, sometimes using it in a form in which it becomes eligible for protection, thus conferring property rights on the exploiter. In discussions with the TK holders themselves (in this case traditional healers and practitioners) the view was the same in all the countries. They had little information as to the uses to which their knowledge could be put by others and cited several cases of researchers both at the national level and from abroad seeking information from them on the usefulness of plants for medicinal purposes. With the exception of two individuals, the healers with whom WIPO met had no information on the intellectual property system and requested sensitization and awareness-raising programs on it. Calls were also made for the mobilization of nationals to realize the value of TK.[10] In most cases however, they could not come to terms with putting a financial value to their knowledge. They felt that such knowledge and natural resources, such as plants, on which their treatments are based were divinely given "gifts" and should therefore be freely shared, especially when it is for health-related purposes.

PRESERVATION AND CONSERVATION OF TRADITIONAL KNOWLEDGE

The Bioresources Development and Conservation Program (BDCP) is a non-governmental organization involved in biodiversity conservation and socio-economic development. The organization has been actively involved in the international processes in support of the Convention on Biological Diversity (CBD) 1992, working in the field of biodiversity protection and promotion in several countries, especially Nigeria. It is involved in biological prospecting for medicines, cosmetics and crop protection agents which are based on leads from traditional ethno-botanical and ethno-medical knowledge and ecological indicators. Its focus is on drug development and conservation. Plants are selected based on indigenous use and are collected directly from the communities. The organization has a long-standing relationship with traditional healers in the country through the National Union of Traditional Healers and Medical Practitioners (NUTHMP). They provide immediate rewards for their contributions on the basis of a benefit-sharing formula which takes the intellectual contribution of the traditional healers to drug development (usually information and samples) into account. Compensation takes four forms: a small cash payment directly to the informant/collector; assistance with community development projects; medical help with acute life-threatening conditions, and long-term royalties from the licensing of any drugs developed at Shaman Pharmaceuticals (California, USA).

In conjunction with Shaman and the Healing Forest Conservancy (HFC), they have established a Fund for Integrated Rural Development and Traditional Medicine (FIRD-TM). This trust fund is completely independent but may administer funds only for the purposes outlined in its charter; that is, conservation, drug development and the socio-economic well-being of rural communities.

Source: <www.bioresources.org> and at the meeting with the BDCP, Lagos, January 19, 1999.

On this issue, a distinction was made between the spiritual aspects of healing practices and the actual administration of medicinal preparations and treatments itself. It was emphasized by the traditional healers that the spiritual aspect could not be taught and they stated that they never provided information on it to others. They were all in agreement however that where benefits are obtained from using this knowledge, it should be shared with the people who provided the knowledge-be it a community or an individual.

On the latter (preservation and conservation of cultural heritage), its importance was repeatedly pointed out particularly as regards folksongs, traditional dances and rituals[11] as well as sculptures.[12]

The question of whether TK should not rather be left in the public domain for the common good was raised at one of the meetings. An informant was of the view that the preservation of knowledge in the past had had a negative impact on research (the main means of ascertaining the real properties of some of the resources which the knowledge holders use). He suggested that putting a price to something which is commonly practiced and communally held within a community commodifies it.[13] Such commodification is generally understood to mean that this knowledge is treated as an article of commerce or an exchangeable unit of economic wealth subject to exploitation, sometimes for profit.

Benefits and Beneficiaries of Protection

The question of ownership of TK was raised within the context of the benefits that holders/owners of TK should receive from the use of their knowledge. It was widely acknowledged by a majority of the people with whom WIPO met that most of the knowledge is communally owned, held and practiced. However, various levels of ownership were identified ranging from individual rights to family rights through community or village rights, to national rights. A distinction was made for traditional medicinal knowledge which was said to be more often individually owned and held in secret. In some cases, as is common in this region, ownership sometimes crosses boundaries as common practices and resources exist in neighboring countries.

IP NEEDS AND EXPECTATIONS # 2
Training on the use of the IP system for all stakeholders, including holders of TK and researchers.

IP NEEDS AND EXPECTATIONS #3
Promotion of the use of technology transfer arrangements as a possible mechanism for benefit sharing.

In the cases where the knowledge is clearly communally owned, it was suggested that the management and exercise of rights be vested in one body acting for the community. This body could also be responsible for ensuring that any benefits are shared within the community, through for example, community development projects. In the case of traditional medicinal knowledge where ownership is usually individual or within a particular lineage, the consensus was that the individual or family should benefit from any commercial exploitation.

Calls were, however, made to recognize the fundamental differences between Western systems and African customs and culture. In traditional African societies, the attitude is that such knowledge is public property and local users may freely use it for their own benefit –thereby using this public property as a basis for further creations which could be individually owned. For example, the creation of poems out of "stock expressions". Asking local people to pay for the use of knowledge which they believe to be theirs would, it was explained, go against the traditional concept of ownership and stifle creativity[14]. This was contrasted with the situation in contemporary western society where the reverse is the case as individualism is seen to be actively promoted[15]. Both objectives identified earlier (under objectives of TK protection) therefore converge in the case of ownership as TK holders would wish to be compensated as a community for the knowledge where it is communally owned, and ensure that mechanisms are in place to guarantee its continued existence.

In one of the countries[16], the difference between ownership and custodianship was stressed. This difference was evident in cases where a community entrusts a particular cultural practice or item to a particular family to administer and maintain on behalf of the community. Examples were given of particular families being

COLLABORATIVE AGREEMENT BETWEEN THE NATIONAL INSTITUTE FOR PHARMACEUTICAL RESEARCH AND DEVELOPMENT (NIPRD), ABUJA, NIGERIA AND HOLDERS OF TRADITIONAL MEDICINAL KNOWLEDGE

NIPRD was created in 1987 as a parastatal of the Federal Ministry of Science and Technology with the primary objective of harnessing natural raw materials in the country for use in the pharmaceutical industry by targeting the development of excipient and active ingredients and the development of traditional medicine. It also has the mandate to monitor the quality of orthodox medicine in the country. It is a United Nations Development Program (UNDP) approved African Regional Center for the Industrial Utilization of Medicinal and Aromatic Plants, and has substantial national government support, and receives grants in material and financial forms from foreign institutions, intergovernmental organizations and other governments. It collaborates closely with many universities in the country where the academics are involved in pharmaceutical research and receives African scientists who want to conduct research at the Institute at no cost.

NIPRD works closely with traditional medicinal practitioners appointing the most reliable as consultants on the basis of mutual obligations as stipulated in a contractual agreement between the consultant herbalist and the Institute which takes into account the Institute's contribution to the development of any drugs and outlines mutual obligations and benefits for both parties.

The responsibilities of the Institute in this collaboration after ascertaining the credibility of the herbalist include: subjecting the extracts obtained form the plants to standard scientific evaluation for safety and efficacy; research and development work regarding the evaluation, safety and rational utilization of the products as well as their formulation into suitable dosage forms for commercial purposes, working with the herbalist as a member of the research team; applying for and bearing the costs of patent applications in the name of the institute, the research fellows involved in development and the herbalist; registration of all trade marks/trade names; and payment to the consultant herbalist of the cost of all the samples received and all related incidental costs (such as travel, communication costs etc.)

The responsibilities of the consultant herbalist include: complete disclosure of the plant materials, methods of collection and preparation, dosage and schedule of administration as well as the disease being targeted; provision of sufficient quantities of the correct plant materials to the institute; an undertaking not to disclose the content of his recipe or any other privileged information arising from the research into his preparation to any other research group or party. NIPRD realizes the reluctance of genuine consultant herbalists to disclose their knowledge which is usually a family secret. They therefore take all the time required to cultivate strong relationships with each herbalist based on trust, assuring them of the protection of their immediate and long term interests through clauses in the agreement which the Institute has a total commitment to honor.

Many multinational pharmaceutical companies have expressed an interest in marketing the drugs developed by the Institute and modalities for such cooperation need to be developed with scope for technology transfer agreements built in. The Institute expressed a need for training for its staff on the use of the intellectual property system and ways in which it could be made more accessible and affordable to users from developing countries (as without a UNDP grant, patenting costs would have been prohibitive to the Institute) and training on the negotiation of licensing agreements.

Source: Meeting with Professor Charles O.N. Wambebe, Director General, NIPRD, Abuja, January 20, 1999.

responsible for making certain ceremonial drums, for carving swords, or for the performance of certain ceremonial songs or dances. In these cases, the families do not own the knowledge, but have only been chosen to guard it and exercise it on behalf of the community. Benefits arising from the commercial exploitation of any of the skills or dances described above would be attributable to the community and not the family concerned. The families in fact would not have the right to grant access to the works. It follows therefore that ownership is attributed to the community and any benefits arising from such community owned knowledge should be for the community and not the "custodian" families. The issue of commonality of knowledge/resources across borders was raised frequently but no apparent solution to the problem was offered.

The benefits of protecting TK are at the core of a project which a university in one of the countries is embarking on concerning the investigation of sources of dyes[17].

The basis of their research is the traditional process (described by the researchers as slow and laborious) which women in the community[18] use to extract color from plants. The objective of the project is to improve on the technique in cooperation with the women. The women are the source of the knowledge and as the head of the department of the university put it *"our role is to help them acting as "resource persons" to the traditional holders of this knowledge....to see how the process can be improved...to enable them to retain their traditional use of local dyes instead of turning to synthetic dyes"*. The benefits of explaining the potential of the traditional practices were not only looked at from the financial perspective but more as a means of protecting cultural heritage. The same academic went on to add: *"Their TK is now being eroded as the technique is now being replaced with the rapid introduction of the use of synthetic dyes"*. He made calls for the academic community to become more *au fait* with intellectual property issues to enable them further research in these different areas".[19]

A related view to the above which was expressed at another meeting was that the proliferation of western broadcasts on television and radio has eroded some African traditions (such as telling traditional folktales by moonlight which until the 1970's was a regular part of family life in many countries[20]) and affected the focus of the new generation.[21] Religion was also seen as being responsible for the loss of TK. One view expressed was that ...*"the liberalization of religion should not have affected the need to safeguard the authentic culture of the people"*.[22]

Many traditional healers stressed that traditional medicine has always been very important in the daily lives of the people[23] and complained of the pace by which modern medicine is overshadowing traditional methods. They however conceded that they were now increasingly collaborating with modern practitioners with whom they exchange information and cooperate to find treatments in the most difficult cases[24].

The traditional medicinal practitioners complained in each country of the lack of governmental support or recognition of their contribution to health care. Their interests in getting some recognition was emphasized over and above financial reward. They gave several examples of people in the country not recognizing their value although they were sought out as the last resort *"when all else fails"*, including some orthodox medical practitioners. One view expressed was that there was no encouragement by the government of traditional medicinal practices. However, evidence from the meetings also shows that government-run research institutions set up in three of the countries work very closely with traditional practitioners and they are now receiving more recognition. In Mali[25], the Department of Traditional Medicine at the National Public Health Research Institute (INRSP) under the Ministry of Health is by definition run under the auspices of the Government and has a working protocol with the herbal practitioners.

It renders a public service to them by carrying out clinical trials. At the Center for Scientific Research into Plant Medicine, Mampong, Ghana, the cooperation with the traditional medicinal practitioners was acknowledged not only by the traditional practitioners themselves but also widely across board in the country. The case was similar in Nigeria. Please see box below. Repeated calls were made for WIPO to provide training on intellectual property as it applies to traditional medicine to holders of TK, researchers and government officials.

Documentation

Documentation was advocated as an important element in the protection of TK in all the countries. The main reasons given for this were that it could:

- contribute to the identification of existing knowledge and practices in a community or country;
- serve to prevent the distortion of the knowledge and practices;

- act as a record of the knowledge and practices of the people;
- serve as evidence of ownership.

The need for documentation was described as urgent in many cases as countries were said to stand a great risk of losing their knowledge which is usually held by older people. Some of this knowledge has not been passed down to people of the younger generation and this was attributed to a widely acknowledged lack of interest by this generation.... *"westernization is leading up to an erosion of the passing on of knowledge ..the younger ones are not interested in TK systems..."*[26]. **In Ghana**, one person described the problem as follows:

> *"In the 1950's when the knowledge was still very vibrant and in regular use and interest in it was keen, there seemed to be no risk of it being lost, but now, the older generation are dying with the knowledge and some of the practices are no longer complete. The other day I was watching a performance of the Fontomfrom drums [which are special drums played to honor the chiefs just before they sit to preside over meetings or ceremonies] and noticed that some of the smaller drums which traditionally formed part of the drum ensemble for such occasions were not being used...there are so many examples of this.."*[27].

IP NEEDS AND EXPECTATIONS #1
Awareness-raising at the national level of the intellectual property aspects of TK

The issue of whether to have a protection mechanism in place before documentation of the knowledge or document it with a view to protecting it was raised. Documentation was considered important and it was generally agreed that protection could not really be granted without documenting existing knowledge to provide a basis for such protection. However, concerns were expressed as to the information becoming part of the public domain if it is documented without first having some form of protection in place[28].

A note of warning was sounded, however, on the fact that documentation does not necessarily lead to protection and should not be perceived as such, *"..it (documentation) is necessary to preserve the culture and to keep it alive"*[29]. This statement is understood to mean that documentation is recognized as a means of recording and preserving culture and not necessarily as a means of protecting the culture;

Several examples were cited of documentation efforts in all the countries, including: **In Nigeria**, the publication of the first Nigerian Herbal Pharmacopoeia to record the country's wealth of resources in this area and the establishment in 1996 of a national documentation center for folklore, a self-sustaining non-governmental organization which has started recording visual works forming part of the national heritage mainly on audio and video tapes; **In Ghana**, the efforts by the Center for Scientific Research into Plant Medicine[30] in documenting certain remedies for ailments and the contributions of the International Center for African Music and Dance to the documentation of African heritage (see box below).

INTERNATIONAL CENTER FOR AFRICAN MUSIC AND DANCE (ICAMD), UNIVERSITY OF GHANA, LEGON

The primary mission of the Center is the promotion of international scholarship and creativity in African music and dance. One of its main priorities is to serve as an archival, documentation and study center for African music and dance. The center's primary goal in this respect is to develop a unique library of oral texts (interviews, song texts, stories etc.), unpublished manuscripts and documentation of musical events (such as festivals, rituals and ceremonies), and the acquisition of manuscripts, books and audio-visual materials on African music, dance, drama as well as general works in the field of ethnomusicology and music education. The documented works include anthropological and historical materials on African societies and cultures, dictionaries and encyclopaedias of music, language dictionaries and a substantial collection of audio and video recordings of African music, dance and oral literature.

Source: ICAMD Newsletter, September, 1998 and at meeting with Professor J.H. Kwabena Nketia, Director, ICAMD, January 25, 1999.

Means of Protecting TK

Use of Intellectual Property

TK was seen by many informants as a nebulous concept which could not be protected by just one system of laws, in this case intellectual property law. Views were expressed to the effect that the intellectual property system can not recognize collective ownership of what, in most cases, is oral knowledge which is not strictly "new" in nature, given that it is mainly knowledge that has been handed down from generation to generation. A call was made for the intellectual property system to "*..move with the times*" as attempts to adapt these knowledge systems to the "orthodox" intellectual property system could lead to the knowledge systems being compromised. However, the majority of people feel that if intellectual property can contribute in any way to the protection of TK, and at the minimum, lead to the acknowledgement of the rightful owners of the knowledge, it would have served a purpose.

On a more macro level, one view expressed is that there is little financial capacity or capability to exploit the resources or protect this knowledge effectively in many developing countries. Therefore it is felt that there is scope for cooperating with foreign companies under mutually beneficial terms.[31] Questions of preventing access by legislation or regulations were largely perceived as futile in communities where any interest in their knowledge could translate to some immediate relief from pressing economic burdens. One factor which was seen to be a barrier to protection was the lack of cooperation between the holders of TK themselves. In cases where there are several people within a community that have access to the knowledge, a lack of a united structure within the community often leads to several channels for accessing the knowledge. However, in **Senegal,** there is one example of cooperation by traditional healers[32] in controlling the outflow of the knowledge. When approached individually for information on their knowledge, they have an agreement to direct all inquiries to their coordinator who discusses this with the members of the association and a decision whether or not to provide the information is taken on this basis. In this way whatever information is given out is recorded and the uses to which it will be put noted.

An approach to protection which was often suggested was for regional cooperation between neighboring countries but it was recognized that the modality for such cooperation could be complicated. It was suggested that the national governments could be the custodian of the resources providing a point of contact for people who want access to it and channeling the benefits of any such exploitation into research for the common good of the people.[33].

One issue on which there was common agreement was that no efforts to protect TK could succeed without working closely with the holders of the knowledge, recognizing their existing "traditional" protection mechanisms, where they exist.

Protection in the minds of many of the people WIPO met, as has been mentioned earlier, was more to do with preservation than protection against use by others. In this respect, one association of healers has tried to ensure the knowledge does not die with one generation of healers by instituting a method of learning where it is mandatory for each healer to have an apprentice to whom he teaches all that he knows and as such the knowledge is transmitted, although not the spiritual aspects which they say cannot be learnt, as they are divinely given gifts.[34]

Intellectual property practitioners, including lawyers and staff of the national intellectual property offices with whom WIPO met suggested some possible ways in which the IP system could be used to protect TK. This was important they said, because, contrary to popular belief, not all of the knowledge is in the public domain. WIPO was requested to provide advice, guidance and assistance with the development of legislation on the protection of TK; particularly by sharing the experiences of other countries in this respect.

In all the countries visited, specific suggestions were made on the possible uses of aspects of intellectual property law to protect particular products originating from TK or practice. These include: the registration of the **designs** of the "tie and dye" cloth in the case of the women in Nigeria and Mali, as discussed above; the use of **appellations of origin** and **geographical indications** for the protection of the "bogolan" cloth (also known as mud cloth) in Mali and the need to develop a regime for the exercise of collective rights over these designs. The need for IP to recognize collective ownership was also expressed in Senegal.[35] In this respect, the use of **collective marks** was discussed. Some countries provide for the registration of collective marks which are used to indicate the affiliation of enterprises using the mark or which refer to identifiable standards met by the products for which the mark is used. Collective marks may be owned and used by an association as a body or its members individually.

IP Needs and Expectations #5
Provision of technical advice and assistance on the development of legislation on the protection of TK.

IP Needs and Expectations #6
Need to develop guidelines on the patenting of TK, simplify the procedures and revise costs of processing patent applications.

Although WIPO encountered examples of the use of the patents in three of the countries visited, criticisms were repeatedly leveled at the patent system at various meetings on two main counts. Firstly, patents were cited as one major example of where utilization of intellectual property to protect TK would be problematic due to the strict rules that apply to eligibility for patentability. In order to be eligible for patentability, an invention must fall within the scope of patentable subject matter and must meet several criteria if it is to be eligible for patent protection. For an invention to be patentable, it must meet the requirement of novelty, must be capable of industrial application, and must exhibit a sufficient inventive step. An invention is new if it is not anticipated by prior art. Prior art in turn is everything disclosed to the public in tangible form. For TK which has been passed from generation to generation, questions of novelty arise as they are generally characterized as old, pre-existing knowledge. While it follows that knowledge in itself without being translated into an invention is not patentable, inventions which are based on pre-existing knowledge (some TK), it is argued by some, do not meet the novelty requirements of the patent system. These criteria were therefore seen as having the potential for excluding TK and TK based inventions from IP protection.[36]

The second count had to do with the complexity of the patent system and cost related issues. In **Nigeria,** the National Institute for Pharmaceutical Research and Development (NIPRD) has filed 3 patents in 46 countries through the *Organization Africain de la Propriete Intellectuelle* (OAPI) (see box below) and the African Regional Intellectual Property Organization (ARIPO) (see box in the chapter on the Eastern and Southern African FFM). In **Mali**, a traditional practitioner has also patented three of his medical preparations. In both cases, the parties concerned expressed their reservations about the crippling costs of patenting and the technicality of the process. They requested a review of patenting costs and a simplification of the process, particularly for developing countries.

A suggestion was made by one of the lawyers WIPO met with for the establishment of an informal patent-type registration system under which people in the TK constituency could register their rights and which could serve as evidence of ownership and prevent others laying claim to it. It was not clear however whether this system was expected to operate internationally or at the national level. A specific request was made for WIPO to develop a complete set of guidelines dealing specifically with the patenting of TK.[37]

The use of trade secrets was advocated strongly given the fact that it does not have the stringent requirements of the patent system. Additionally, WIPO was informed that knowledge of traditional practices has been protected by secrecy in certain communities.[38]

ORGANISATION AFRICAINE DE LA PROPRIÉTÉ INTELLECTUELLE (OAPI)

Until 1962, patent rights in the majority of francophone African countries were governed by French laws. The French National Patent Rights Institute (INPI) was the National Authority for each of these countries, then grouped within the French Union (Union Française). The majority of the French Union member countries having become independent in 1960, found it necessary to create a body of their common territory, in respect of conventions on patent rights. This creation found its legal justification in *article 19* of the Paris Convention for the protection of Industrial Property (as revised) 1967, which states that "...[the] countries of the Union reserve the right to make separately between themselves special agreements for the protection of industrial property, in so far as these arrangements do not contravene the provisions of this Convention".

On the basis of this provision, 12 African countries (Federal Republic of Cameroon, Central African Republic, Republic of Congo, Republic of Côte d'Ivoire, Republic of Dahomey, Republic of Upper Volta, Republic of Gabon, Republic of Mauritania, Republic of Senegal, Republic of Chad, Malagasy Republic, Republic of Niger) covering territories of French expression and culture together decided to create a single body to act as the national patent rights authority for each of them. The African and Malagasy Patent Rights Authority(OAMPI) was thus born on September 13, 1962 by the agreement known as the 'Libreville Agreement' covering patents, trademarks or trade names and industrial drawings or models.

The withdrawal of the Malagasy Republic for reasons of sovereign judgement, the need to cover all rights items, notably models, trade names, products and service trademarks, the need to better involve patent rights in development, and the desire to be the seed of a larger integration, led the founding states to revise the Libreville Agreement and to create the *Organisation Africain de la Propriété Intelectuelle* (OAPI) by the adoption of a new convention signed in Bangui on March 2, 1977.

The 'Bangui Agreement' revising the Libreville Agreement, serves as national law for each of the member states and the protection title which it issues are automatically valid in all the member states. The headquarters of OAPI is in Yaounde, in the Republic of Cameroon.

The items covered by the Bangui Agreement are: Patents, Models, Products and Service Marks, Industrial drawings and models, Trade Names, Captions and Copyright. The Organization plans to extend the scope of items it protects, to include outline diagrams (integrated circuit maps) and plant resources.

OAPI seeks to fully contribute to the economic development of ITS member states, notably through an effective protection of intellectual property and related rights in order to render their territory attractive to investment.

Adapted from the OAPI website <www.oapi.wipo.net>

Contracts

The use of contracts as exemplified in the NIPRD example above was advocated at many meetings as a possible option. In **Ghana, the CSRPM** is working in cooperation with the Registrar General's department to prepare contracts that govern the relationship between traditional healers and the health department. In each country visited, there was an established system or attempts at establishing a working relationship between a government institution, research institutions and the traditional healers[39]. This was with a view to putting a much needed legal framework for protection in place to govern these relationships.

There is evidence of use of the intellectual property System (use of patents to protect medical preparations based on TK) by traditional healers or their representatives in **Mali**[40] and **Nigeria**[41] and the process has started in **Ghana** where several state-of-the-art searches have been conducted.[42] WIPO conducts a search on behalf of applicants from its member states on the state-of-the-art as regards a given technology/invention with a view to establishing what the latest development in an existing field is for example; rice processing. This enables researchers to focus their research by steering it in the right direction, thereby not researching into issues which have already been covered and avoiding covering charted territory. It also enables them to have a certain target in mind and focus their resources on this. This is the dynamic side of the of the Patent system as opposed to the protection side of the patent system as it offers the opportunity for people to seek and obtain information which facilitates their research evaluation and development processes.

A herbalist in Mali[43] described the difficulty he experienced in trying to get recognition for one of his preparations, finally receiving a clinical certificate after 23 years (a pre-requisite for filing of patents in his country, a member of OAPI). He now has two patents registered through OAPI and says he is still in debt as a result adding that the chances of recouping these costs from the sales of the medicine are very low. Users of the patent system in the countries visited sometimes have to seek external funding to pay for the costs such as the NIPRD example-see box above. As the Malian herbalist put it. *"I have realized that patenting is only one step and does not guarantee that the drug will be commercially viable…".*

Sui Generis Protection

In the West African context, where cultures, practices, techniques and resources exist across national borders the need for a regional approach to protection was advocated as where legislation to protect TK exists in one country and not the other, the purpose would be defeated. Although many people with whom WIPO met recognized the benefits of having some regulations to the access and use of biological resources, the point was made strongly on occasion, that such legislation should not be counter-productive, acting as a barrier to access.

Draft regional legislation prepared by the Organization of African Unity (OAU), of which all the countries visited are members was the only example of sui generis regulations encountered. Please see description of the draft legislation in the box in the chapter on the FFM to Southern and Eastern Africa.

IP NEEDS AND EXPECTATIONS #7
Practical training on the use of applicable elements of the IP system to protect TK

IP NEEDS AND EXPECTATIONS # 8
The need to explore an effective regional approach to the protection of TK.

IP NEEDS AND EXPECTATIONS #9
Examination of customary systems for the protection of TK.

Examples cited were of the "Kente" cloth[44] and the "Bogolan" cloth[45] which a few countries neighboring each other claim ownership of. A traditional medicine practice bill has been drafted in one of the countries and at the time of writing was due to be debated in parliament.[46] Advocates for *sui-generis* protection supported the earlier views that existing laws are inadequate.[47]

Customary Law and Practice

Traditional systems of protection exist within families and the point was made several times that these should not be ignored. The **Dogon people in Mali** describe their sculptures as "open air libraries" because the history of the people can be studied by reading the symbols on the structures. This was described as a traditional way of preserving their knowledge. These sculptures have different meanings to the Dogon people but are only seen as art for decorative purposes in the West and are being copied thereby compromising the original meanings.[48] The representatives of the Dogon People with whom WIPO met however stated that they do not require additional protection as they rely on spiritual protection and where their knowledge or practices are exploited for uses to which they should not be put, people do it at their own risk and should be prepared to bear the consequences. The general view was that customary law and practice is used across the countries for protection, preservation and promotion of cultural heritage and should be explored as possible basis for the international protection of TK.

BEST COPY AVAILABLE

General

At several meetings, requests were directed to the governments of the countries on aspects of protection of TK and they include:

- calls for an in-depth survey of the existing knowledge to complement documentation efforts, including an ethno-botanical survey to determine which herbs and plants are useful for medicinal purposes or otherwise.[49]
- the need for a multi-disciplinary dedicated and competent arm of government to focus on matters relating to the use and protection of TK.[50] Governments were further advised to take an all inclusive approach, involving all government institutions concerned, to avoid compartmentalization which could lead to inaction.
- the need to create community herbal heritage centers to give the communities some ownership over the knowledge and those who want to exploit it, a point of reference.[51]

Although some governments are now realizing the importance of TK resources with the creation of research institutes in three of the four countries visited in this region[52], the general view of those with whom WIPO met in all the countries was that the governments have a greater role to play particularly with regard to equipping these institutions and creating an enabling environment for them to achieve the objectives for which they were set up. Governments were therefore called upon to boost the research and development capacities of these institutes by investing more in them. On the research issue, Governments were requested to assist and support academics involved in research and development to encourage them to extend their focus beyond their ultimate goal of publishing papers in academic journals. In areas where partnerships could be forged with industry, governments were requested to facilitate such relationships, where possible. Industry was also seen as having a role in forging partnerships.[53] Finally, Governments were urged to encourage traditional medicinal practitioners by providing them with tax breaks where they had taken the initiative to develop remedies which could be commercially viable.[54]

SUMMARY OF INTELLECTUAL PROPERTY NEEDS AND EXPECTATIONS

1. [illegible] at the national level of the intellectual property [illegible]
2. Training [illegible] the intellectual property system for all stakeholders including [illegible] knowledge and researchers.
3. Promotion of [illegible] documents as a possible [illegible]
4. Need for [illegible] intellectual property implications of documentation [illegible]
5. Provision of [illegible] in the development [illegible] traditional knowledge.
6. Review of [illegible] patent applications and [illegible]
7. The need to develop guidelines for the patenting of traditional knowledge.
8. The need to explore an effective regional approach to the protection of traditional knowledge.
9. Examination of possible IP type protection for traditional knowledge, using customary law.

Notes

[1] Meeting at the Center for Scientific and Industrial Research (CSIR), Accra, Ghana. Present were, Professor Otteng Yeboa, Deputy Director General, Environment and Health; Professor Kwesi Ayensu, Deputy Director General, Institute of Natural Sciences; Dr. Owusu Ansah, Director, Institute for Industrial Research; Mr. Emmanuel Sackey, Scientific Officer, Institute for Industrial research, Mr. J. Gogo, Science and Technology Policy Research Institute; Florence Ejei, Scientific Secretary, Institute of Natural Sciences. The CSIR has 13 institutes involved in research in Agriculture, Science Policy and Industry.

[2] Meeting with the Nigerian Folklore Society, Lagos, Nigeria, January 21, 1999. Present at the meeting were: Dr. S.O. Williams, President; Dr. G.G. Darah, immediate past President; Messrs. Humphrey Bekaren and Kunle Filani and Mrs. Bisi Ogundiran, Treasurer.

[3] Meeting with Professor J. H. Kwabena Nketia, Director, International Center for African Music and Dance, University of Ghana, Legon, January 25, 1999.

[4] Meeting with the Group N'Ko (the Cultural Movement for Development). Present were Mr. Mahmoud Bamba, President; Mr. Richard Toé, Mr. Adama Traoré and Mr. Souncolo Dembelé, Bamako, January 29, 1999.

[5] Particularly the examples from Abeokuta, Nigeria and Bamako, Mali. Meetings with the Kemta Ikotu Adire Cottage Industry, Abeokuta, Nigeria and with Mrs. Awa Ly, Bamako, Mali, January 29, 1999.

[6] Which helps in conservation of the forests. Information provided at meeting with the National Directorate of Nature Conservation (DNAER), where the delegation met with Mr. Yaya Tamboura, Director, and Mr. Bourama Niagate, Water and Forestry Engineer, Bamako, Mali, January 27, 1999.

[7] Emphasized particularly at the meeting with the University of Agriculture, Abeokuta, Nigeria, January 21, 1999; and at the meeting with the Institute of Rural Economy (IER), Bamako, Mali, January 28, 1999, where WIPO met with Dr. Modibo Sidibé, Assistant Director General, Mr. Abdoul Y. Maiga, planner-teledetector, and Dr. Abdoul K. Traoré, Director of the Regional Center for Agronomic Research in Sotuba.

[8] These spiritual aspects were considered very important in every country although it was recognized that they can not come under scientific scrutiny and as such may not be regarded as protectable.

[9] Dr. E.N. Mensah, Director, Institutional Care Division, Ministry of Health, Accra, Ghana, January 22, 1999.

[10] Meeting with representatives of the Ministry of Environment, Science and Technology-Mr. E.P.D. Barnes, Director; Dr. Dwumfour and Mr. Larsey Mensah, Accra, Ghana, January 22, 1999.

[11] During a visit to Agogo, Ghana, Nana Akuoku Sarpong, the Presidential Staffer for Chieftaincy Affairs and Chairman of the National Commission on Culture who is a paramount chief in the Ashanti region highlighted the importance of maintaining their culture ranging from issues to do with succession, marriage and inheritance to their rituals and dances.

[12] The Dogon masks of Mali were said to be copied now without according them the traditional meanings according to their age old customs.

[13] Meeting with Bioresources Development and Conservation Program (BDCP), represented by Professor E.N. Sokomba, Executive Director; and Mr. Anthony Onugu, Environmental Economist, Lagos, Nigeria, January 19, 1999.

[14] Meeting with Professor J. H. Kwabena Nketia, Director, International Center for African Music and Dance, University of Ghana, . Legon, January 25, 1999.

[15] Ibid.

[16] Ghana. Particularly at the meeting with Professor J. H. Kwabena Nketia, Director, International Center for African Music and Dance, University of Ghana, Legon, January 25, 1999.

[17] Professor Adetoro, University of Agriculture, Abeokuta, Nigeria, January 21, 1999.

[18] Women from Abeokuta, Nigeria who traditionally produce "Adire" and "Adire Eleko" fabric

[19] Meeting with Professor Julius Okojie, Vice Chancellor of University of Agriculture, Abeokuta, Nigeria, January 21, 1999.

[20] Meeting with the Nigerian Folklore Society, Lagos, Nigeria, January 21, 1999. Present at the meeting were: Dr. S.O. Williams, President; Dr. G.G. Darah, immediate past President; Messrs. Humphrey Bekaren and Kunle Filani and Mrs. Bisi Ogundiran, Treasurer.

[21] Meeting with Professor Asiedu Yirenkyi, Chairman of the National Folklore Board, Accra, Ghana, January 25, 1999.

[22] Meeting with three representatives of the Ginna Dogon Association for the protection and promotion of Dogon culture in Bamako, presided over by Mr. Ambadio Kassogué, January 29, 1999.

[23] Meeting with Association Malango, Fatik, Senegal, January, 31, 1999.

[24] Meeting with a group of traditional therapists at the traditional hospital in Keur Massar, Senegal. Present were Mr. Mamadou Sambo Diaw, Mr. Abdoulay Fati, Mr. Amedou Ba and Mr. Djibril Ba, Keur Masser, Senegal, January 30, 1999.

[25] National Public Health Research Institute (INRSP), Bamako, Mali.

[26] Meeting with the Director General of the National Office of Technology Acquisition and Promotion (NOTAP), Dr. David Okongwu, and Mrs. Funke Araba, Assistant Director, Lagos, Nigeria, January 18, 1999.

[27] Meeting with Professor J. H. Kwabena Nketia, Director, International Center for African Music and Dance, University of Ghana, Legon, January 25, 1999.

[28] Meeting with representatives of the Ministry of Environment, Science and Technology-Mr. E.P.D. Barnes, Director; Dr. Dwumfour and Mr. Larsey Mensah, Accra, Ghana, January 22, 1999.

[29] Meeting with Professor J. H. Kwabena Nketia, Director, International Center for African Music and Dance, University of Ghana, Legon, January 25, 1999.

[30] The Center for Scientific Research into Plant Medicine, CSRPM, was established by the Government of Ghana in 1973 to lead research relating to the development and improvement of herbal medicinal drugs through cooperation with the Ghana Psychic and Traditional Healers Association (now the Ghana Federation of Traditional Medicine Practitioners' Associations). The Center, which attained WHO status as a collaborating Center for Traditional Medicine in 1981, is also charged with collating and

disseminating results and scientific/technical data on herbal medicinal research and with establishing botanical gardens of medicinal plants in Ghana. (Information provided by Professor Oppong-Boachie, CSRPM).

[31] Meeting with Professor Arouna Keita, Faculty of Medicine, Pharmacy and Odonto-Stomatology of the University of Bamako, and Head of the Department of Traditional Medicine at the National Public Health Research Institute (INRSP), Bamako, Mali, January 28, 1999.

[32] Association Malango, Fatik, Senegal.

[33] Meeting with representatives of the Ministry of Environment, Science and Technology-Mr. E.P.D. Barnes, Director; Dr. Dwumfour and Dr. E.N Mensah, Accra, Ghana, January 22, 1999.

[34] Meeting with Association Malango, Fatik, Senegal, January 31, 1999.

[35] Meeting with Dr. Hamady Bocoum, Head of Department of Human Sciences, Fundamental Institute for Black Africa (IFAN) at the Cheick Anta Diop University, Dakar, Senegal, February 1, 1999.

[36] For example, the Malian Association for the promotion of Inventive Research and Innovative Technology, Bamako. (AMPRIT) confirms that the Bogolan cloth does not meet the three requirements for Patenting. At Meeting of January 27, 1999. Present were Mr. Seydounour Diallo, Secretary General; Madame –Konate, Vice President; Mr. Fousseyni Toure, Inventor.

[37] Professor Oppong-Boachie, CSRPM, Ghana.

[38] Dr. E.N. Mensah, Director, Institutional Care Division, Ministry of Health, Accra, Ghana, January 22, 1999.

[39] Nigerian Institute for Pharmaceutical Research and Development (NIPRD), Nigeria; Center for Scientific Research into Plant Medicine (CSRPM), Ghana; National Public Health Research Institute (INRSP), Mali and in Senegal, the National Hospital in Dakar works in close cooperation with some traditional healers in the treatment of particular illnesses such as sickle cell anemia. In some cases, units have been created within the Ministries of Health to deal solely with traditional medicine.

[40] Mr. Mandani Traoré, Traditional healer, Mali.

[41] Nigerian Institute for Pharmaceutical Research and Development (NIPRD) jointly with healers.

[42] Center for Scientific Research into Plant Medicine (CSRPM), Mampong, Ghana. 17 searches at the time of writing.

[43] Mr. Mandani Traoré, Traditional healer, Kayes, Mali.

[44] Mostly claimed as originating in Ghana but also claimed by people in neighboring Togo and Cote d'Ivoire.

[45] Traditionally recognized as originating from Mali but communities in neighboring countries also lay claim to its ownership.

[46] Ghana.

[47] At meeting with the National Directorate for Arts and Culture, Bamako, Mali, January 27, 1999. Present were Mr. Téreba Togola, Director; Mrs. Haidara Aminata sy; Mr. Mamadou Demba Sissoko; Mr. Salia Malé and Mr. Namory Keita.

[48] Meeting with three representatives of the Ginna Dogon Association for the protection and promotion of Dogon culture in Bamako, presided over by Mr. Ambadio Kassogué, Bamako, Mali, January 29, 1999.

[49] Meeting with the Registrars Department, Ministry of Commerce and Tourism and the Federal Environmental Protection Agency (FEPA), the agency designated as the national focal point for the Secretariat of the Convention on Biological Diversity (SCBD), Abuja, Nigeria, January 21, 1999. The Registrars Department was represented by Mr. Salihu Aliyu, the Acting Registrar of Trademarks, Patents and Designs; Mr. Maiwada M. Omar, Assistant Registrar; Mr. Shafiu Adamu Yauri, Assistant Registrar and Ms. Titi Dabiri; and FEPA was represented by Alhaji M.M. Umar, Director; also at the meeting with Professor Charles Wambebe at Nigerian Institute for Pharmaceutical Research and Development (NIPRD), Abuja, January 21, 1999.

[50] Roundtable at the Center for Scientific Research into Plant Medicine (CSRPM), Mampong, Ghana, January 25, 1999. Representing the Center were Professor K. Oppong-Boachie, Director; Dr. Archie Sittie, Acting Deputy Director; Mr. Osafo Mensah, Head of Pharmacology; Mr. E.E. Mensah, Head of Microbiology; Mr. Yaw Amayaw, Scientific Information Officer and Messrs. Abraham Quarcoo, Frederick Aboagye, W. Ofosuhene-Djan, Michael Assuah and George Antepim, all Research Officers. The following traditional healers were also present: Messrs. Joseph Atiaku, Ransford Atiaku and Djam Atiaku of Alafia Bitters and Dr. G.K. Noamesi; and at the meeting with the Bioresources Development and Conservation Program (BDCP), represented by Professor E.N. Sokomba, Executive Director; and Mr. Anthony Onugu, Environmental Economist, Lagos, Nigeria, January 19, 1999.

[51] Meeting with Professor Charles Wambebe at the Nigerian Institute for Pharmaceutical Research and Development (NIPRD), Abuja, Nigeria, January 21, 1999.

[52] At the meeting with the Bioresources Development and Conservation Program (BDCP), represented by Professor E.N. Sokomba, Executive Director; and Mr. Anthony Onugu, Environmental Economist, Lagos, Nigeria, January 19, 1999.

[53] Meeting with Mr. Mandani Traoré, Bamako, Mali, January 26, 1999.

FFM to the Arab Countries

Box 1. ARAB FFM: COUNTRY MEMBERSHIP IN INTERNATIONAL IP TREATIES

International IP treaties	**Oman**	**Qatar**	**Egypt**	**Tunisia**
Paris Convention	1999	2000	1975	1884
Berne Convention	1999	2000	1977	1887
Rome Convention	-	-	-	-
Madrid Agreement	-	-	1952	1892
The Hague Agreement	-	-	1952	1942
PCT	-	-	-	-
UPOV Convention	-	-	-	-
TRIPS Agreement	-	1996	1995	1995

Box 2. ARAB FFM: COUNTRY MEMBERSHIP IN TK-RELATED TREATIES AND PROCESSES

TK-related treaty/process	**Oman**	**Qatar**	**Egypt**	**Tunisia**
UNESCO Heritage Conv.	1981	1984	1974	1975
UNESCO Cul. Property	1978	1977	1973	1975
ILO 169	-	-	-	-
IUPGR – FAO	Yes	No	Yes	Yes
CBD	1995	1996	1994	1993
UNCCD	1996	-	1995	1995

The FFM to Arab countries took place from February 27 to March 13, 1999. The mission visited the following countries during this period: Sultanate of Oman, State of Qatar, Arab Republic of Egypt, and the State of Tunisia. The Interim Mission Report, which contains information as to the persons and entities with whom WIPO consulted, is set out in Annex 4.

The presentation of the information in this section is organized under the following headings: Terminology and Subject Matter; Promotion of Folklore, Crafts and Heritage; Beneficiaries of Rights in Cultural Heritage and Folklore; Documentation; Means of Protecting Cultural Heritage and Folklore; and, Management and Enforcement of Rights in Cultural Heritage and Folklore.

Terminology and Subject Matter

Arab countries are the collective custodians of one of the world's most notable civilizations, and counterparts on this FFM pointed out that this shared custodianship engenders an intellectual property (IP) concern over the protection of heritage which is specific to the region. FFM participants used the terms "cultural/popular heritage," "folklore," and "crafts" to refer to the subject matter which they consider requires protection.[1] Numerous persons used the first two terms synonymously, whereas certain legal instruments to which they referred distinguish between the meaning of the two terms.[2]

The term "**cultural/popular heritage**" is used in such legislation in accordance with the "cultural property" definitions of existing cultural property conventions.[3] Whereas the definition of 'cultural property' in these international instruments covers primarily physical forms of property, FFM counterparts often included in their use of the term intangible forms of cultural heritage. They pointed out that their main objective behind implementing protection of physical forms of cultural property was to protect the intangible expression of culture that is embodied in those objects. Several persons consequently included both tangible and intangible cultural property in their use of the term.

The persons consulted during the FFM described "**folklore**" as having several characteristics:

- it is passed on from generation to generation in unfixed forms;
- it is a community-oriented creation in that its expression is regulated by local traditions, standards, and expectations;
- its expressions are often not attributable to individual authors; and,
- it is being continually utilized, developed and innovated by the communities in which it lives.[4]

Promotion of Folklore, Crafts and Heritage

One central concern of FFM participants in relation to their cultural heritage/folklore was the avoidance of its disappearance.[5] Keeping cultural heritage/folklore alive means keeping it in use and in ongoing development. Hence, the countries visited are encouraging the contemporary use of cultural heritage and folklore as a matter of policy.

IP NEEDS AND EXPECTATIONS # 1
Study of the economic and trade-related aspects of exploitation of expressions of folklore and their protection by IPRs.

Such encouragement has primarily been pursued through promotion projects to stimulate the use, dissemination and further development of traditional arts and crafts. While these projects initially aim at keeping cultural heritage in use, they often produce highly original works and products. The practical IP aspects of crafts and heritage promotion projects are illustrated in this section by three concrete examples: the Bahrain Crafts Center, Manama; the House of Omani Heritage, Muscat; and the National Art Development Industries of Mashrabeya, Cairo.

The **Crafts Center of Bahrain, Manama, Bahrain** (the Center) was created in 1995 and operates under the umbrella of the Ministry of Oil and Industry of Bahrain. It resulted from a project introduced in 1990 to encourage Bahrainis to develop their crafts and trades, many of which were in danger of disappearing due to modern methods of production. The Center has had considerable commercial success with its work and now houses eleven workshops with crafts projects and operates twelve crafts projects in artisans' homes.

The IP aspects and commercial potential of the crafts projects were highlighted when the traditional principles of papyrus production were used with palm leaves, thereby producing palm leave paper, a novel product by traditional methods. Since its inception in 1990, the palm leave paper has had considerable commercial success and its production has been expanded from paper sheets to bookmarks, greeting cards, giftbags, artistic papersheets and painted paper, with Arabian scenes on them.[6] Since the inception of the project, the innovative but tradition-based paper production technique has been kept as a trade secret. The project director explained that, *"It is a secret till now. The Exhibition has closed the room where we show how to make the dough, because we are killing the project if we show it."* The Center Director explained that in a globalized economy tradition-based craft projects are facing stiff competition for their products. *"There are other places in the world who do similar crafts: Banana leaves are being made into paper in India, papyrus in Egypt. . . We tried to build a crafts industry in Bahrain. I am trying to protect each project. I want to prevent others in Bahrain and India from copying the products, because otherwise the project will be killed."*[7] As a Bahraini newsmagazine reported, *"The palm-paper workshop of the Craft Center. . . is unique in the Gulf region and. . . a couple of countries in the region. . . would like to start up their own palm-paper operations."*[8] The persons concerned therefore emphasized that the availability of IPRs and their enforcement internationally is essential to the success of crafts promotion projects.

The **House of Omani Heritage, Muscat, Oman** (the House) is maintained by the Ministry of National Heritage and Culture of the Sultanate of Oman, which is also responsible for implementing the National Heritage Protection Law of 1976 of Oman (see section on 'Cultural Heritage Legislation' below). The Ministry of Heritage purchases products of traditional Omani craftspersons and artisans, including pottery, wool weaving, metalwork, wood carving, basket weaving. The handicrafts are certified, exhibited, and offered for sale at subsidized prices at the "House of Omani Heritage," which is maintained by the Ministry. The Ministry helps Omani artisans and craftspeople to market their works, thus promoting the conservation of Omani heritage on which the products of these artisans are based. Officials of the Ministry pointed to the importance of labelling regulations and certification marks for traditional Omani products, such as *halwa omania*, a national pastry produced according to traditional methods and as an embodiment of traditional Omani lifestyles.[9] Trade secret protection of such pastry was also discussed at the House.

IP NEEDS AND EXPECTATIONS # 2

Development of licensing contracts for expresions of folklore which are in the holdings of existing documentation institutions.

The **National Art Development Industries of Mashrabeya, Egypt, Cairo** (NADIM) is a family enterprise engaged in training and production in the high-quality traditional arts and crafts. NADIM was established in 1978 with a staff of four traditional artisans and now employs more than 500 master artisans, artisans, workers and apprentices. The enterprise produces high-quality handicrafts, including products of turnery, inlaying, carving, interlocking joinery of star patterns, furniture making, staining, upholstry, appliqué, metal works and carpet weaving. NADIM has been involved in large-scale projects, including palaces, villas, hotels, presidential rest houses and corporate offices, such as the headquarters of the Arab League. The work of NADIM has been exported to countries in Asia, the Americas and Europe.

Experts specified the "traditional workshop" as the site of "transmission of lore from generation to generation", which has become detached from the institutions of the formal education system and formal market regulation systems, such as IPR regimes. NADIM follows the traditional system of knowledge transmission by organizing its workshop along the customary apprenticeship system. *"The workshop is an active beehive that embraces all levels of expertise, the master artisans, the artisans, the workers, and the apprentices. It embodies the traditional educational system."*[10] Within this customary system of apprenticeship, traditional knowledge of the craft is passed on to the apprentice selectively.

NADIM's products are not "traditional" *per se*, in the sense that they imitate old forms, designs and products. Rather the products are original and innovative, while the methods of producing them as well as the mode of transmitting these production methods follow traditional principles. According to FFM participants, the traditional artisan is *"guarding and upholding the traditional principles of the art and at the same time making his individual imprint that announces his creations and solutions for problems he faces [in his own time]."*[11]

Experts provided examples of traditional principles of the art in order to clarify how expressions of folklore *"reflect the traditional artistic expectations of such a community."*[12] For example, *"four important aesthetic* *values govern the interlocking joinery: complete symmetry between the two halves of the design, the use of traditional motifs only, the coherence between the design and its surroundings, and the solidity of the work."*[13] Traditional artisans are innovating based on such traditional principles. Because of their compliance with such principles, their products are identified as part of the cultural heritage.

The practical objective of craft and heritage promotion projects has been well summarized by one informant:

> *"Traditional artists and craftsmen should be encouraged and helped to employ their experiences, skills, and abilities of creation and innovation, to produce items needed and accepted by the modern Egyptian family for its daily life. The most important task is to put the authentic essential elements of the lore, which have to be guarded carefully, in the framework of a product that they create to answer a real need for the Egyptian family which leads a life completely different from the life of the ancestors. One has to take into account the facts of the modern market without sacrificing the cultural identity of this people."*[14]

IP Needs and Expectations # 3
IP awareness raising for staff members of the various folklore documentation centers in Arab countries.

IP Needs and Expectations # 4
Develop documentation strategies which take into account IPR implications, such as phased documentation (GCC) and comprehensive documentation (Oman).

IP Needs and Expectations # 5
Produce classifications of folklore which would allow documentation work to be managed according to its IPR implications.

Beneficiaries of Rights in Cultural Heritage and Folklore

Numerous persons met with on the FFM considered that the property rights in cultural heritage and folklore should be vested in the State.[15] A similar understanding is reflected in the Tunisian Copyright Act, 1994 (see section on 'Copyright and related rights' under 'Means of Protecting Cultural Heritage and Folklore' below).

Documentation

Most persons consulted consistently emphasized the value of cultural heritage in that it reflects the collective identity, development and personality of Arab people.

They foregrounded the importance of documentation as a basis for:

- effective protection from illicit exploitation; and
- establishing cultural identity, historical continuity and social community in a time of rapid modernization.[16]

The practical IP aspects of documentation initiatives are illustrated in this section by three practical examples: the Oman Traditional Music Center, Muscat, Oman; the Gulf Cooperation Council Folklore Center, Doha, Qatar; and the Center of Arab and Mediterranean Music "Ennejma Ezzahra," Sidi Bou Said, Tunisia.

The **Oman Center of Traditional Music, Muscat, Oman** was created in 1983 by His Majesty Qaboos bin Said, the Sultan of Oman, to document, conserve and promote traditional Omani music. Since then the Center has documented more than 80% of Oman's musical traditions, including more than 23 000 photographs, 580 audiovisual recordings and a large number of sound recordings. The Center has also compiled digitized databases of these documentation materials and officials at the Center inquired about the legal protection of non-original databases of folkloric works.

The Center has developed a two-step approach to documentation: first, the Center maps which traditions are still alive by speaking to traditional musicians and, second, the traditional music and dances are recorded in sound recordings, audiovisual recordings, photographs or a combination thereof. The Center takes a comprehensive approach to the documentation of musical traditions, which includes not only a recording of a particular musical work, but also of associated dances, social customs and gatherings, healing methods, planting and farming methods, fishing methods, handicrafts, etc. This comprehensive approach to documentation is necessary because "in Oman traditional music is part of traditional lifestyles," which include healing, fishing, planting and other work techniques.[17]

In its documentation work, the Center has identified more than 130 different types of traditional music in Oman, which can be classified, however, as expressions of four main traditions of Omani song: sea and fishing songs, celebration songs, Bedouin traditional music and traditional mountain music. Experts at the Center indicated that the development of new ways of performing musical heritage in Oman without the consent of the traditional performer violates customary understanding of heritage use and transmission. Nevertheless, they felt that exclusive rights over the reproduction of traditional music should not be granted. However, they did welcome the granting of performers' rights to performers of traditional Omani music.

The **Gulf Cooperation Council (G.C.C.) Folklore Center, Doha, Qatar** (the Center) was established in 1982, to pursue several objectives in relation to the folklore of the Arab Gulf States. The objectives are listed in the Text Box 'Objectives of the G.C.C. Folklore Center, Doha.' In the past 18 years the Center has compiled extensive collections and databases. Officials of the Center considered the legal protection of databases and compilations of folkloric expressions to be an IP issue of immediate relevance to folklore documentation projects.

The Center's approach to documentation was articulated in a study of birth customs in the Arab Gulf states: *"The significance of collecting and studying customs and traditions stems also from the fact that they are an essential and integral part of our folk heritage which, in itself, is a key-component of the character and identity of society."*[18] The Center is now producing a classification of expressions of folklore from the Gulf states.

Requests for access to the Center's collections have been made by newspapers, museums, TV stations, schools and universities (for teaching purposes), researchers, book publishers, exhibition halls and shopping malls, etc. The photographs, sound recordings and audiovisual recordings of Gulf folklore from the Center's collections have been reproduced on picture postcards, in books, as well as radio and television broadcasts. In order to establish a clear legal structure for access to, and commercial exploitation of, the Center's holdings, a licensing contract was developed, which provides that the licensee shall not commercially exploit the licensed material.

OBJECTIVES OF THE G.C.C. FOLKLORE CENTER, DOHA

The objectives of the Center include:
- documentation and classification of expressions of folklore in the GCC member states;
- protection of Gulf folklore from misuse and illicit exploitation and preservation of the rights of GCC member states in this respect;
- publication of studies on Arab Gulf folklore
- awareness raising about the importance of folklore;
- establishment of central databases of folklore.

The Centre of Arab and Mediterranean music "Ennejma Ezzahra", Sidi Bou Said, Tunisia (The Centre) was established in 1991with the objectives of: documentation and conservation of expressions of traditional Arabic and Mediterranean music; establishment of a database comprising an extensive and almost exhaustive set of recordings of traditional Tunisian music; publication and making available of such music to the public; publication of studies and research on traditional Tunisian, Arabic and Mediterranean music; and, organisation of concerts.

The Centre has compiled an impressive collection of documents through a systematic approach for such purpose. These documents are classified and made available to the public. It includes at its premises a Research Center, which offers research facilities for students and scholars in the field of musicology. It also has an *atelier de lutherie* which teaches skills for the restoration as well as for the making of such musical instruments. The Centre undertakes to organize seminars, conferences and international study meetings on different topics pertaining to its area nof specialization. It publishes also studies of such issues.

IP NEEDS AND EXPECTATIONS # 6
Information on IP aspects of regional folklore documentation initiatives.

Persons met with during the FFM also provided WIPO with numerous examples of projects where physical cultural heritage was preserved for its inherent value to development and Arab culture as a whole. For example, in 1994 the Arab Fund for Economic and Social Development provided three million US Dollars for the **Bayt El Suhaymi Documentation, Restoration and Conservation Project**, which seeks to conserve, restore and document a traditional Cairene house built in 1648 which is characteristic of several historical and architectural periods.[19]

Training and Awareness Raising: Many parties expressed a strong need for IP training tailored specifically to the IP aspects of documentation of cultural heritage, folklore and crafts. See further at "Training and Awareness Raising" under "Means of Protecting Cultural Heritage and Folklore" below.

Means of Protecting Cultural Heritage and Folklore

The notion of the State as the guardian of the people's cultural heritage has evolved in some Arab countries from the mere association of objects, works and monuments with a particular nation's cultural heritage, to a wide-ranging set of legislative efforts to protect intangible cultural creations from disappearance, mutilation, misappropriation, or illicit commercial exploitation.[20] The means of protecting cultural heritage and folklore, that is to say, the availability, scope and use of rights in cultural heritage, is presented below under the following headings: cultural heritage legislation, copyright and related rights, industrial designs, and trade secrets.

Cultural heritage legislation

The most direct and comprehensive means of protecting cultural heritage which Arab States have adopted are national heritage protection laws. The following will contain a summarized description of two examples of such endeavors to protect heritage through national legislation: (1) the Code du Patrimone, of Tunisia, 1994; (2) the National Heritage Protection Law of the Sultanate of Oman, 1976. The essential aims of these and similar laws for national heritage protection are :

- First, preserving the integrity of cultural property that is located in the country by either :
  a) preventing its natural deterioration (and thus helping their restoration) ; or
  b) prohibiting any action that may provoke its degradation or alteration;
- Second, keeping within the country property that may have considerable historical value, by prohibiting or restricting its export.

The Code du Patrimoine of Tunisia was enacted by Law No. 94-35, dated February 24, 1994. The objective of this Code is to protect the archaeological, historic and traditional heritage of Tunisia.[21] It encompasses a wide range of objects which, in view of their historic, scientific, artistic, or traditional aspects, bear an important national or universal value.

The Code provides a very broad definition of the object of protection. The protection may cover and apply to movable goods of all kinds, to cultural sites, including archaeological sites, to historic monuments, as well as to an agglomeration of monuments such as whole villages, cities, or parts thereof.

The protection may take different forms :

- Measures designed to declare certain monuments or certain sectors as safeguarded, classified or protected.
- Measures designed to submit any activities of modification or reparations or demolitions of such protected buildings to authorization.
- Measures designed to prohibit the export of a protected good.

The National Heritage Protection Law of the Sultanate of Oman was enacted by Royal Decree No. 6/80. The purpose of the decree is to preserve national heritage by protecting cultural properties and upgrading public awareness on national heritage.[22]

It applies to all types of monuments and antiquities, as well as to "chattels of cultural properties". The definition of "chattels of cultural property" is widely embracing as they may include archaeological fossils, rare archetypes of fauna and flora, fragments of artistic ruins, ancient coins, engravings and marks, rare manuscripts, ancient books, documents and printed matter of special historic, artistic, scientific or literary value, as well as traditional style furniture items, painted earthenware, musical instruments, jewellery, precious stones, and weapons.

IP NEEDS AND EXPECTATIONS # 7
Clarifying the relationship between the protection of folklore and the cultural heritage conventions.

IP NEEDS AND EXPECTATIONS # 8
IP information on IP aspects of managing registries of cultural heritage/expressions of folklore.

The protection afforded to this subject matter takes many forms, including :

- A nation-wide overall *inventory* which is to be conducted and regularly updated. It must encompass all properties that form the entire entity of Omani national heritage.
- Measures designed to *prohibit all kinds of activities or actions that may modify, alter or in any way tamper with the property,* be it a monument or a mobile cultural property.
- Measures designed to *restrict or prohibit the export* of mobile cultural properties, as well as their purchase and sale.
- Measures designed to *contribute to the cost of restoring, repairing and renovating registered monuments* deemed to be of special historical, artistic or scientific importance.

The National Heritage Law is intended to implement the obligations of the Sultanate as a Party to the UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export, and Transfer of Ownership of Cultural Property, 1970, the accession to which by the Sultantate was sanctioned in Royal Decree No. 69/77.

There are strong similarities and convergence's between the Tunisian and the Omani legislation in terms of the broad objectives pursued and the means used to meet such objectives. Both instances provide good examples of the extent to which the preservation of national heritage is of paramount importance in the visited countries.

Copyright and related rights

While one of the primary objectives of copyright protection is the stimulation of creativity, FFM participants emphasized their understanding that copyright should also act as a protector of works as cultural creations.[23] By vesting exclusive rights in the work's creator and providing him or her with an injunctive remedy for breach, one effect of copyright is the protection of those cultural expressions, which qualify as works, from distortion, inaccuracy and misattribution. FFM participants foregrounded this role of copyright as a safeguard against reproducing, altering or deviating from a work without the author's consent.

BEST COPY AVAILABLE

On this mission, the FFM participants discussed the role of copyright law in relation to this matter.[24] In Tunisia, the means of protection and preservation of the integrity of folklore by regulating its commercial exploitation go back to the Copyright Act of 1966.[25] These provisions have been incorporated into the Copyright Act of 1994[26], primarily in Article 7 of the Act. Discussions with FFM participants focussed on the practical application of Article 7 of the Act, and, more particularly, the criteria helping to define a folkloric musical work, as well as criteria used to assess whether its treatment (by commercial exploitation) is in conformity with the Act.

IP NEEDS AND EXPECTATIONS # 9
Establish collective management of copyright in folkloric works.

IP NEEDS AND EXPECTATIONS # 10
Clarify the definition of folkloric musical works in relation to deriviative musical works.

Article 7 of the Tunisian Copyright Act commences by deeming folklore as belonging to the national heritage. Folklore subject matter could hence be treated as a property of the State. It follows that the use of folklore is not free. Such use is regulated and is subject to certain conditions. More precisely, an authorization of the Ministry of Culture has to be obtained prior to any "commercial use" of a work of folklore or of a production inspired from a work of folklore. Any authorized person has the obligation to pay an amount to the *"caisse sociale"* of the *Organisme Tunisien de la Protection des Droits D'Auteurs* (the OTPDA).

The purpose of this legislation is twofold:

- first, to ensure that the integrity of the work of folklore has been protected against any act of distortion ; and,
- second, to make sure that a monetary compensation is paid for the use of the work.

It is noteworthy that Article 7 of the Tunisian Copyright Act has been effectively implemented. Such practical experience may be of benefit not only to Tunisia, but also to other countries where legislation contains similar provisions which may not yet have been enforced.

The Tunisian experience with the protection of works of folklore appears very interesting, primarily because legislative provisions have been applied and implemented in practice. It can also serve as an example to other countries which have enacted similar provisions in their copyright laws but have not yet applied them. The Tunisian Ministry of Culture has already established a certain jurisprudence that other countries could benefit from in applying their own legislation. FFM participants suggested that it may be helpful for the Tunisian experience to be better known, discussed and debated.

Trade secrets

Trade secrecy as a means for protection of folklore and TK was mentioned by FFM participants in various areas of subject matter. For example, they referred to certain TK elements under the customary apprenticeship system which may qualify for such protection (see description of NADIM Industries in section "Promotion of Cultural Heritage and Folklore" above).

Experts at the **Traditional Medicine Clinic** in **Muscat, Oman** discussed trade secrets as possible means of protecting their traditional medicinal practices and knowledge. The Traditional Medicine Clinic was established by His Majesty Sultan Qaboos bin Said in 1988 in order to conserve Omani national heritage in the field of traditional medicine and in order to provide free-of-cost medical treatment. The Clinic employs six traditional healers from different provinces of the Sultanate and treats about 25 to 35 patients daily with traditional plant medicines. Each traditional healer working in the Clinic specializes in a specific medical field and practices exclusively or primarily in that field.

Each healer keeps his specialized medicinal knowledge and practices secret and does not disclose it to anyone, including other staff and practitioners of the Clinic. The Head of the Clinic outlined the importance of this secrecy system, while emphasizing that the products and services of the Clinic were provided to patients free of cost and for non-commercial purposes. Nevertheless, the healers confirmed that the traditional knowledge has commercial value; that the information is secret in the sense that it is not generally known or readily accessible to other persons in the Clinic; and that it is subject to reasonable efforts by the healers to keep it secret. Discussions focused on possible protection of such traditional medicinal know-how as trade secret.[27]

At the **House of Omani Heritage, Muscat, Oman** the issue arose about the protection of a national pastry. It was put to the FFM that different pastry producers would prepare the product with different results. And that more than otherwise, the recipe for the production would be kept secret and would pass from generation to generation, from father to son.

FFM counterparts in Tunisia accorded similar importance to trade secrecy in the protection of TK of **Andalusian artisans** for the production of traditional caps. The artisans keep secret the know-how of producing the dyes which lend the caps their distinctive features. There is a guild of traditional artisans, which was recently reinstituted in Tunisia and has the full authority to decide on matters of traditional production of the caps. FFM participants pointed out that such guilds could form a competent authority to exercise rights in such crafts products.[28]

Industrial designs

There was a strong concern on this FFM about the protection of traditional designs, since these form an important part of Arab cultural heritage.[29] Such needs were expressed in relation to traditional designs embodied in carpets (knotted or woven), upholstery, traditional costumes and garments, jewelry, woodwork, needlework and embroidery, etc. As with other physical elements of heritage, FFM participants felt that the subject matter which needs protection is not the physical craft or heritage product, but the traditional design itself which is embodied in or applied to that product.

IP NEEDS AND EXPECTATIONS # 11
Pilot projects on using trade secrecy to protect technical know-how in traditional medicine and handicrafts.

IP NEEDS AND EXPECTATIONS # 12
Enhancing existing documentation of tradition-based designs to the minimum documentation requirements for industrial design protection.

IP NEEDS AND EXPECTATIONS # 13
Quantitative studies on the trade losses of Arab countries due to unauthorized making and selling of carpets emboding traditional Arab designs in non Arab countries.

Counterparts in Oman pointed out that traditional designs of Omani sailors' garments were being copied in Asia without authorization by the Omani authorities or communities. Experts at the **G.C.C. Folklore Center, Doha, Qatar**, reported that the traditional designs embodied in the *sadu* of the Gulf states (wool weavings made traditionally in the Arab Gulf states) are being copied in Asian countries and imported to Gulf states. It was therefore felt that protection of these designs at the international level is needed. Other persons in Qatar pointed out that innovation based on traditional jewelry designs was being stifled by a lack of available protection at regional and international levels. Reference was made to international standards for the availability of industrial design protection as provided by the TRIPS Agreement. In Oman and Egypt a need was expressed for the protection of traditional designs embodied in local *kelims*. Artisans of Egyptian carpet factories also illustrated how innovative designs were being inspired by integrating traditional Egyptian dying and weaving techniques with traditional Persian carpet designs, which were documented in books and catalogues.[30] Persons who the mission met with in Tunisia mentioned cases concerning protection of the traditional "cage for birds".

In relation to the originality requirement for design protection, officials of the **Bahrain Crafts Center, Manama, Bahrain,** described independent creation in the use of traditional designs: *"Of course there's also the argument about holding fast to certain traditional designs. But you can't depend all your life on rigidly maintaining the forms and styles that have been used for generations. Our artisans must modernize and find a contemporary expression for their craft which both maintains the classic but moves onto other horizons in its design."*[31]

BEST COPY AVAILABLE

IP Training and Awareness Raising: On the IP system in general, participants of this FFM expressed a strong need for IP training tailored specifically to the protection of cultural heritage, folklore and crafts. They specified that such training should include information on both existing IP systems and on features and options for possible new IP systems that apply to cultural heritage and folklore.

They requested specifically:

- IP training for representatives and staff members of the various folklore documentation Centers in the Arab countries (see the Centers described under 'Documentation' above);
- training in the development of licensing agreements for cultural heritage and folklore held in the collections of documentation centers;
- awareness raising seminars about intellectual property and folklore protection;
- specific training on IP aspects of regional folklore documentation projects;
- IP training on protection of databases compiled from such projects.

Some counterparts emphasized that such training and awareness raising activities should take place at the subregional level with the attendance of sub-regional folklore documentation centers and national IP offices.

A number of persons also emphasized that there should be awareness-raising among folklore holders and specialists about IP implications by publishing information about intellectual property aspects of folklore in the newsletters, journals and publications of existing folklore documentation centers.

TK Protection in Other Policy Areas

- **Desertification and Land Cover Change**: Participants of this FFM emphasized the importance of traditional ecological knowledge (TEK) for stemming desertification and ensuring environmental conservation in Arab countries.[32] Discussions concentrated on traditional technologies of irrigation such as the *Aflaj* system of irrigation. Some participants referred to the relevance of TK to discussions under the Food and Agriculture Organization (FAO) on the conservation of plant genetic resources.[33] They also referred to provisions of the UN Convention to Combat Desertification, which provides, *inter alia*, that Member States "protect, integrate, enhance and validate traditional and local knowledge, know-how and practices, ensuring, subject to their respective national legislation and/or policies, that the owners of that knowledge will directly benefit on an equitable basis and on mutually agreed terms from any commercial utilization of it".[34]

- **Sustainable Agriculture**: Several experts emphasized that traditional agricultural practices and knowledge were essential to maintaining sustainable agriculture, particularly in arid and semi-arid regions.[35] Interest was expressed in the relationship between the conservation of plant genetic resources in arid and semi-arid regions and the practices and investments of traditional farmers. The relevance of plant breeders' rights in relation to farmers' rights as respective incentives for investment in agriculture and PGR conservation was discussed.

Management and Enforcement of Rights in Cultural Heritage and Folklore

Participants of this FFM stressed the importance of being able to enforce rights over cultural heritage and folklore internationally. With regard to cultural heritage protection, reference was made to existing international instruments which put certain obligations on states to protect their own and other nations' cultural property,[36] such as the UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export, and Transfer of Ownership of Cultural Property, 1970 and the UNESCO Convention for the Protection of Cultural Property in the Event of Armed Conflict, 1954. Some parties saw a contradiction between the recognizing the cultural property as part of the "common heritage of mankind"[37] and granting and enforcing IP rights over intangible elements of such property.

SUMMARY OF INTELLECTUAL PROPERTY NEEDS AND EXPECTATIONS

1. Study of the economic and trade related aspects of exploitation of expressions of folklore and their protection by IPRs
2. Development of licensing contracts for expressions of folklore which are in the holdings of existing documentation institutions
3. IP awareness raising for staff members of the various folklore documentation centers in Arab countries
4. Develop documentation strategies which take into account IPR implications, such as phased documentation (UAE), comprehensive documentation (Oman), etc
5. Produce classifications of folklore which would allow documentation work to be managed according to its IPR implications
6. Information on IP aspects of regional folklore documentation initiatives
7. Clarifying the relationship between the protection of folklore and the cultural heritage conventions
8. IP information on IP aspects of managing registries of cultural heritage/expressions of folklore
9. Establish collective management of copyright in folkloric works
10. Clarify the definition of folkloric musical works in relation to derivative musical works
11. Pilot projects on using trade secrecy to protect technical know how in traditional medicine and handicrafts
12. Enhancing existing documentation of tradition based designs to the minimum documentation requirements for industrial design protection
13. Quantitative studies on the trade losses of Arab countries due to unauthorized making and selling of carpets embodying traditional Arab designs in non Arab countries

Notes

[1] The terms are *al-turâth al-shacbîy* (popular/cultural heritage), *al-thaqafa al-taqlideya* (traditional culture), *al-fulklûr* (folklore) and *al-sinacât al-harafîa* (crafts/craft industries), respectively.

[2] For example, the Code du Patrimonie of Tunisia of 1994 and the Tunisian Copyright Act of 1994 use both terms respectively.

[3] Such as the Convention on the Means of Prohibiting and Preventing the Illicit Import, Export, and Transfer of Ownership of Cultural Property, and the UNESCO Recommendation on the Safeguarding of Traditional Culture and Folklore.

[4] Discussions in Muscat, February 27, 1999; Doha, March 2-4, 1999; Cairo, March 10, 1999; and meeting with officials of the Organisme Tunisien de la Protection des Droits d'Auters (OTPDA), Tunis, March 11, 1999.

[5] This persistent theme was articulated by FFM participants at practically all venues of the mission, namely Muscat, Barka, Doha, Cairo and Tunis.

[6] Kietzman, Roy, "Palm Paper Papyrus. Hand Made in Bahrain", *Bahrain This Month*. date n/a: 66.

[7] Telephone discussion with Dr. Aisha Matar, Director, Bahrain Crafts Center, Doha-Manama. March 6, 1999.

[8] Kietzman. *op.cit.*, 66.

[9] Discussions with officials of the Ministry of National Heritage and Culture, Muscat, February 27 1999.

[10] Ibid., 2, emphasis added.

[12] Section 2 of the UNESCO-WIPO Model Provisions define expressions of folklore as "productions ... reflecting the traditional artistic expectations of such a community".

[13] Nadim, *op.cit.*, 7.

BEST COPY AVAILABLE

[14] Ibid., 4 to 5.

[15] Oman Heritage Ministry, Muscat, February 27, 1999 and OPTDA, Tunis, March 11, 1999

[16] Meeting with officials of the Oman Traditional Music Center, Muscat, February 27, 1999; meeting at the GCC Folklore Center, Doha, March 2-4, 1999; and discussion at the Center of Arab and Mediterranean Music "Ennejma Ezzahra," Sidi Bou Said, March 11, 1999.

[17] Meeting with officials of the Oman Center of Traditional Music, Muscat, February 27, 1999

[18] Al-Fuhail, Isma'il A. and Amna Rashed Al-Hamdan. *Birth Customs in the United Arab Emirates, Qatar, Kuwait.* Doha: The G.C.C. Folklore Center, 1998: 14.

[19] Experts at the Bayt El Suhaymi Project, Cairo, March 8, 1999. See also, Arab Fund for Economic and Social Development. *Bayt El Suhaymi Documentation, Restoration and Conservation Project.* Cairo, 1997: 3.

[20] Meeting at G.C.C. Folklore Center, Doha, March 2-4, 1999,

[21] Meeting with officials of the Institut National du Patrimoine, Tunis, March 12, 1999, and the Organisme Tunisien de la Protection des Droits d'Auteurs (OTPDA), Tunis, March 11, 1999.

[22] Meeting with officials of the Ministry of National Heritage and Culture, Muscat, Oman, February 27, 1999.

[23] Meeting with officials of the G.C.C. Folklore Center, Doha, March 2-4, 1999; and the Organisme Tunisien de la Protection des Droits d'Auters (OTPDA), Tunis, March 11, 1999

[24] Meeting with officials of the Organisme Tunisien de la Protection des Droits d'Auteurs (OTPDA), Tunis, March 11, 1999, and meeting with officials of the Tunisian Ministry of Culture, March 13, 1999.

[25] *Loi sur la propriété littéraire et artistique du 14 fevrier 1966, articles 1er §, a-13.*

[26] *Loi no. 66-12 du 14 fevrier 1994 sur la propriété littéraire et artistique.*

[27] Meeting with officials of the Traditional Medicine Clinic, Muscat, February 28, 1999. They considered that the TK held by the traditional healers of the Clinic may qualify as trade secret under Article 39.2, TRIPS Agreement. Discussions focused on the implementation of this provision of the TRIPS Agreement.

[28] Meeting with officials of the OTPDA, Tunis, March 11, 1999

[29] Meetings with: officials of Oman Ministry of National Heritage, Muscat, February 27, 1999; officials of the Qatar Copyright Office, March 2, 1999; officials and visitors of the G.C.C. Folklore Center, Doha, March 2-4, 1999; traditional artisans in Cairo, March 8, 1999; officials of OPTDA and Institute du Patrimonie, Tunis, March 11, 1999.

[30] Meeting with traditional artisans of Saleh Carpet Factory, Cairo, March 8, 1999.

[31] Keitzman, Roy. "Bahraini wool-weavers to visit Jordan." *Bahrain Tribune* (18 August 1997): 4.

[32] Meeting with officials of the Ministry of Agriculture and Fisheries, Muscat, February 28, 1999

[33] *Ibid.*

[34] Article 17(c), UNCCD.

[35] Meeting with officials of the Ministry of Agriculture and Fisheries, Muscat, February 28, 1999

[36] E.g. Article 4.1, Convention for the Protection of Cultural Property in the Event of Armed Conflict: Contracting Parties "undertake to respect cultural property situated within their own territory as well as within the territory of other High Contracting Parties by refraining from any use of the property and its immediate surroundings ... which is likely to expose it to destruction or damage." (Article 4.1)

[37] See, Preamble, Convention for the Protection of Cultural Property in the Event of Armed Conflict (1954) and Preamble, Recommendation for the Protection of Movable Cultural Property (1964) ("movable cultural property representing the different cultures forms part of the common heritage of mankind.")

FFM to South America
Mission to Peru

Box 1. Peru FFM: Country Membership in international IP treaties

International IP treaties	
Paris Convention	1995
Berne Convention	1998
Rome Convention	1985
Madrid Agreement	-
The Hague Agreement	-
PCT	-
UPOV Convention	-
TRIPS Agreement	2000

Box 2. Peru FFM: Country Membership in TK-related treaties and processes

TK-related treaty/process	
UNESCO Heritage Conv.	1982
UNESCO Cul. Property	1980
ILO 169	1994
IUPGR – FAO	Yes
CBD	1993
UNCCD	1995

The FFM to Peru took place from May 10 to 13, 1999, in the city of Lima. The Interim Mission Report, which contains information as to the persons and entities with whom WIPO consulted, is set out in Annex 4.

The presentation of the information in this section is organized under the following headings: Terminology and Subject Matter; Objectives of TK Protection; Documentation; Means of Protecting TK; and Management and Enforcement of Rights and Interests in TK.

Terminology and Subject Matter

The question of defining "property" and "private rights" came up frequently in the replies from respondents. In particular, representatives of communities from the mountain region (called "*la sierra*") and from the Amazonian region (called "*la selva*") often referred to collective ownership, and the belief that their intellectual property should be regarded also as collective property.[1] Part of the indigenous peoples of Peru viewed themselves as a unitary entity evolving under the aegis of a single ancestral culture. Knowledge was transmitted from generation to generation, in a sacred, unwritten "book".[2]

Some respondents believed that there was at present insufficient political will to promote the view that intellectual property could also be treated as the product of collective endeavor. Collective creativity was a reality among indigenous peoples. On a global perspective, collective property should be recognized alongside individual property, in as much as different religions and cultures are recognized and coexist.[3]

Objectives of TK Protection

TK is understood as encompassing a broad range of expressions relating to both the arts and technology. Respondents commented, in particular, on the following subject matter for TK protection for artistic expressions:

- oral and literary works;
- music;
- traditional handicrafts, textile designs and patterns.

In recent times, the topic of main concern for the indigenous communities' representatives and the Government authorities has been the protection of TK relating to technology, and in particular:

- conservation of traditional plant varieties and development of new varieties;
- use and exploitation of biological and genetic resources;
- traditional medicine;
- conservation and sustainable exploitation of the environment;

IP Needs and Expectations #1
Recognition of collective creativity and property.

IP Needs and Expectations # 2
Modalities for TK protection that do not prevent sharing and other transmission of TK.

While the need to protect TK and the natural environment against predatory exploitation was paramount, indigenous peoples were reluctant to remain isolated. They have a fundamental willingness to share and exchange their knowledge. TK should be developed and enriched by combination with modern technology. Sharing TK was regarded as essential, but so was recognition of origin and ownership, respect for the inherent traditions, and sharing of economic benefits. TK should not be exploited or commercialized indiscriminately.[4] A system for protecting TK and for compensation for the use therof must be implemented in a manner that will allow the holders of TK to continue using and expanding their knowledge, and prevent the chain of transmission of traditional knowledge from breaking.[5] .

Protection for artistic TK

Protection of traditional indigenous oral **literature** was a special need. Difficulty derived from the fact that oral traditions were being written down and recorded by persons alien to the local culture. Those persons will often present themselves as the "authors" of those traditions, failing to acknowledge the original source, and will distort the tradition.[6]

Respondents felt that improved systems for the protection of traditional **music** are needed. For example, traditional Andean music was being commercialized over the Internet without proper authorization.[7] Traditional **dances** express local traditions and popular wisdom; for example the "chapis" dances tell the experience of a *sierra* native who travels to the *selva* and returns home. Typical *sierra* dances are popular at home and abroad. They are "studied" by foreigners and later adopted, without understanding or respect for the underlying traditions, and without prior consent or compensation.[8] Typical dances are being "taught" by outsiders posing as natives, with the consequence that the traditional expression is distorted or "modernized", with no control possible by the communities of origin.[9]

Appropriate protection was also lacking for the **design** of textile products originating in the native communities. The motifs and designs of traditional weavings were reproduced industrially on T-shirts and other garments and wearing apparel. Those designs were slavishly photocopied from the original works, and reproduced by local companies that compete unfairly with the native designers.[10] For example, Wari[11] woven tapestries and textile bands were photographed and then given to other weavers to reproduce the original design.[12] In the Amazon region, foreign missionaries had come in to learn the technique and art of traditional textile designs, which they subsequently disseminated without obtaining authorization. [13]

Other cultural expressions exposed to insufficient protection included **astronomical calendars**. For example, the Wari calendar, a pictorial composition comprising multiple icons and figures put together in Pre-Inca times, is regarded as belonging to the Wari people. Having no recognition of authorship or control over its reproduction and commercialization was considered as unfair.[14]

Protection for technology-related TK

Indigenous communities in Peru are preoccupied with what is perceived as "theft" of their technologically-rich TK. They lack the means to prevent practices that prejudice their interests and prevent the legitimate holders of TK from controlling the commercial exploitation thereof. Greater respect and protection of indigenous TK was demanded. Other complaints referred to researchers who spent several years in native communities, without any information, concrete results or feedback being received by those communities. Researchers had on occasions turned out to be little more than a cover for commercial interests wanting access to indigenous secret knowledge.[15] In particular, there was concern that TK relating to natural resources could be patented by third parties without prior consent being sought.[16]

In respect of traditional and new plants, peasants and traditional farmers maintain and perpetuate **traditional varieties** of food crops and other plants, thus preserving biodiversity *in situ*. Farmers in the *sierra* move around to trade their seeds in communal and regional fairs, at which the best varieties are awarded prizes. Traditional varieties had properties and characteristics not found in modern "green revolution" varieties.[17] The onslaught of modern economy brought with it the danger that certain traditional varieties might be lost if that traditional system of cultivation and exchange was upset. Moreover, traditional knowledge about the properties, characteristics and uses of those varieties risked disappearing faster than the varieties themselves.[18]

Many traditional **medicinal plants** are preserved by local indigenous communities, who have known their healing properties for years or centuries. Foreigners have tried to take that information without respecting or acknowledging the origin and source. It seemed unfair that such TK should be obtained, used and exploited without sharing the benefits.[19] Shamans and traditional healers have been the guardians of traditional healing knowledge. They could feel the repercussions that degradation of the environment has on the health of the inhabitants of the regions concerned.[20]

Complaints were heard that traditional medicinal plants were being "pirated" by persons who exported them for processing abroad. There was no prior consent, and native communities could find themselves negotiating without full knowledge of the purpose of the extraction or the use to which the material will be put. In some cases predatory extraction occurred, without consideration for reforestation or environmental impact.[21]

Indigenous communities also possess valuable TK relevant to the sustainable exploitation and development of the environment. In particular, techniques for crop growing and **cultivation**, using traditional ceremonies and natural fertilizers. Also, traditional hydrology and **irrigation**, and **stone working** techniques are noteworthy, as well as the communities' knowledge of **climate** and seasonal change.[22]

TK is also regarded as including community-held information on the sustainable management of **forests** and wetlands, methods of **hunting** and **fishing**, house **building** and **child rearing**. For example, the traditional techniques of palm leaf weaving was being copied (with no consent or compensation) to build houses and lodges for tourists.[23]

Documentation

Several provinces in the *sierra* region of Peru have limited activities aimed at registering local crop varieties, in particular for potato and other tubers.[24]

165

IP NEEDS AND EXPECTATIONS # 3
IP assistance and advice on documentation projects

A pioneering project aimed at establishing an inventory of traditional agricultural genetic resources of the Peruvian Andes is being developed by the University of Cusco in cooperation with eight indigenous communities in the Department of Cusco and the *Centro de Recursos Genéticos de Tuberosas y Raíces Andinas (CERGETIR)* (Center for Genetic Resources of Andean Tubers and Roots). The project focuses, in particular, on potato varieties and potato seed. It also aims at establishing an agreed protocol for accessing, trading or transferring those genetic resources, based on customary law and practices. The project will identify and describe the relevant biological resources and their associated TK relevant to their traditional uses and applications. For example, certain varieties of potato are traditionally used only for ceremonial purposes, such as weddings, and are conserved only for that use.[25]

Means of Protecting TK

Regulation of access to and benefit-sharing in genetic resources

Access to biological and genetic resources, and sharing of benefits deriving from such resources, are subjects of current preoccupation and activity in Peru.[26] Three legal texts, in force or under preparation, are regarded as particularly relevant, namely:

- Decision 391 of the Andean Community, adopted in 1996, establishing a Common Regime on Access to Genetic Resources; [27]
- the Law for Conservation and Sustainable Use of Biological Diversity, which came into force in 1997; [28] and
- the draft Law for the Protection of Collective Knowledge of Indigenous Peoples. [29]

Further information on Decision 391 and the Law for Conservation and Sustainable Use of Biological Diversity may be found in **Annex 1** to this chapter.

The proposal of a **draft Law for the Protection of the Collective Knowledge of Indigenous Peoples** (hereinafter called "the draft Law") is the result of a major coordination and drafting effort of the Peruvian Government. The proposed law would establish a comprehensive legal framework for the recognition and registration of collective TK relating to the use of biological resources, and rules for accessing such TK. (See Box on "Main Features in the Peruvian draft law on TK Protection" below.)

The declared ***objectives*** of the proposed law are:

- to promote respect for and the protection, preservation, broader application and development of collective TK of indigenous peoples;
- to promote a fair and equitable distribution of the benefits derived from the use of such TK;
- to promote the use of said TK for the benefit of indigenous peoples and humanity as a whole.

The following ***general principles*** are contained in the draft Law:

- Access to collective TK for scientific, industrial or commercial purposes requires prior informed consent from the relevant community or people (Article 7). This may also apply, under certain conditions, to TK in the public domain (Article 12).
- The present generations of indigenous communities are responsible for preserving, developing and administering collective TK for their own benefit and that of future generations (Article 8).
- Protection under the law applies to TK belonging collectively to one or more indigenous peoples, but not belonging individually to any of its individual members. Collective TK is regarded as part of the cultural heritage of the indigenous peoples (Article 9 and 10).

MAIN FEATURES IN THE PERUVIAN DRAFT LAW ON TK PROTECTION

- Access to collective TK for scientific, industrial or commercial purposes requires *prior informed consent* from TK holders.
- Collective TK that is not in the public domain is *protected* against disclosure, acquisition or use, including third parties having obtained the information under confidentiality.
- The *burden of proof* as to the legality of the access, use or disclosure of TK is on the defendant.
- A *register of collective TK* is established; the register is not public, and recordal of TK is optional for TK holders.
- TK *license contracts* must include, in particular, clauses on royalties for use of licensed TK, down payments and a percentage of future sales of products developed from licensed TK.
- A *Fund for the Development of Indigenous Peoples* is established to finance projects for the development indigenous communities.

The draft Law defines the scope of rights of indigenous communities in respect of their TK, and the actions and remedies available to protect that TK. An indigenous community in possession of collective TK is legally protected against any unauthorized or unfair disclosure, acquisition or use of that knowledge, insofar as such TK is not in the public domain (Article 40). This protection extends to third parties having obtained the information under obligation of confidentiality.

Indigenous communities may take legal action against any person infringing their rights in their collective TK, and may request and obtain injunctions and damages. The burden of proof as to the legality of the access, use or disclosure of collective TK is on the defendant (Articles 41, 42 and 43).

A ***register of collective TK*** of indigenous peoples is envisaged. This would serve to preserve collective TK and provide supporting information to protect better the interests of the holders of the TK (Article 15). Recordal of TK would be optional (Article 14). The register of collective TK would not be public, and could only be accessed with prior written consent from the recording community or people (Article 19). The community that has recorded its TK on the register may request that information regarding that TK be notified to one or more foreign patent offices to be taken into account when assessing the patentability of a third party's invention, or the validity of a granted patent (Article 20).

Special provisions regarding the formalities and contents of TK ***license contracts*** are included. Such contracts must be in writing (Article 23), and must establish clauses relating, in particular, to the following matters (Article 24):

- Fees and royalties to be paid to the indigenous people for use of their collective TK. Both down payments and a percentage of future sales of products developed on the basis of said TK should be provided.
- Information to the holders of the licensed TK regarding the purpose, risks, implications of the envisaged uses of the TK, including the possible value of such uses.
- Obligation by the licensee to inform licensor periodically on progress in R & D, industrial or commercial activities regarding products developed on the basis of licensed TK.

The draft law establishes a **Fund for the Development of Indigenous Peoples**, with the purpose of contributing to the overall development of indigenous peoples by financing projects and other activities (Article 34). Indigenous communities could obtain funding by submitting their projects to the Fund's Administrative Committee (Article 35). The Fund would be financed by contributions from the State, international cooperation grants, and a percentage of the economic returns obtained from the exploitation of inventions and other technology developed on the basis of licensed TK (Article 39).

Contract

Several respondents mentioned that contractual arrangements had started to be used by TK holders in Peru as a means of structuring and regulating access to TK and to genetic resources associated with TK. Holders of TK were seeking and obtaining advice from different quarters as to the manner in which access contracts should be approached. Some respondents informed that communities were advised to exercise caution when agreeing to part with their TK or to transfer biological resources, and that they should require compensation in exchange for their information.[30]

Some respondents were skeptical about relying only on clauses guaranteeing returns from future but uncertain commercial exploitation of innovations developed on the basis of licensed TK or transferred biological material. They rather recommended that TK licenses and material transfer agreements involving TK include clauses providing for technical and scientific training aimed at reducing technological dependence, establishment of fiduciary funds for the development of the communities providing the TK or the material, up-front payments and milestone payments not linked to product development by the licensee.[31]

IP NEEDS AND EXPECTATIONS # 4
IP advice and assistance in the negotiation, drafting and enforcement of access and other contracts.

Two examples of contracts for the transfer of biological material and related know-how and TK were the "Biological Collecting Agreement" and the "Know-how License Agreement", concluded in 1996 among Peruvian and foreign parties. Those contracts originated in an earlier grant awarded by the International Collaborative Biodiversity Group Program (ICBG), financed by several foreign aid and health-related agencies of the United States of America. The project for Peru brought together Washington University in St. Louis, Missouri (WU), G.D. Searle & Co., a subsidiary of Monsanto (Searle), the Museum of Natural History of the National University of San Marcos (Museo), Peruvian University Cayetano Heredia (UPCH), the Central Organization of Aguaruna Communities of the Upper Marañon (OCCAAM), the Federation of Native Aguaruna Communities of the Nieva River (FECONARIN), and the Aguaruna Federation of the Domingusa River (FAD), in affiliation with the Confederation of Amazonian Nationalities (CONAP).[32]

The representatives of the Aguaruna and Huambisa organizations participating in those agreements regarded this experience as a breakthrough in the recognition of their TK ownership, and an example of indigenous communities' capability to negotiate access to their TK.[33] Other observers, including foreign NGO's, were somewhat more critical since they disagreed with what was regarded as the "sale" of the country's genetic resources.[34]

The Biological Collecting Agreement entitles WU, Museo and UPCH to obtain samples of biological materials and medicinal plants from a defined collection area, and to obtain *information regarding the historic use by the collaborating Aguaruna native communities of plant resources for medicinal purposes*. The preamble clauses explain that WU, Museo and UPCH wish to collect and study the biological diversity of plants and certain animals in the collection area, to *obtain medicinal data of plants* used in that area, and to *screen* plant extracts obtained therefrom for biochemical or biological activity *for purposes of development of new pharmaceutical products*. The Agreement also contains a Code of Conduct - see Box "Agreed Code of Conduct".

In conjunction with the Biological Collecting Agreement ("the agreement"), a "Know-how License Agreement" ("the know-how license") was concluded between Searle and the collaborating native communities, in recognition of the fact that the plant extracts provided under the biological collection agreement may involve the use, in whole or in part, of the know-how of the Aguaruna and Huambisa peoples. The know-how license deals with the *use of the know-how of the Aguaruna people for the research and development of new medicinal and pharmaceutical products*.

Prior to the Biological Collecting Agreement, WU and Searle had concluded a License Option Agreement, which gives Searle access to the plant extracts collected by WU and UPCH.

Further information on the provisions in the **Biological Collecting Agreement** and the **Know-how License Agreement** noteworthy in connection with TK are contained in **Annex 2** to this chapter.

TK protection in other policy areas

The *Asociación de Defensa y Desarrollo de las Comunidades Andinas del Perú (ADECAP)* (Association for the Defense and Development of the Andean Communities of Peru) conducts development projects and activities in the mountain Department of Huancavelica, in Tayacaja province. It concerns indigenous communities with some 130,000 inhabitants living between 2,800 and 4,500 meters above sea level. Some 80% of that population remain monolingual Quechua[35] speakers, in spite of efforts to introduce Spanish. ADECAP aims at developing that region mainly in the areas of education, health and agricultural productivity. Development projects are implemented and executed by the communities themselves, with support from the Association.[36]

AGREED CODE OF CONDUCT

In conjunction with the implementation of the Biological Collection Agreement, the parties involved agreed to practice a number of guidelines of conduct and ethics regarding the collection of biological material and ethnobotanical information, and the recognition of IP. The following norms contained in the agreed code of conduct are noteworthy:

- Collaborate with Aguaruna organizations, communities, and individuals, as well as others to develop multilingual and multicultural educational and training programs and other projects needed to enhance the cultural and linguistic recognition of the Aguaruna People and to improve the quality of life in Collaborating Communities.
- Collaborate in projects of conservation in order to maintain the biodiversity of the ecosystem.
- Develop programs of economic value at community and regional levels by restoring and enhancing economically significant plants and by other means.
- Take a socially responsible approach in their associations with the Aguaruna People, including a full feedback of scientific and other findings and results.
- Help secure the recognition of traditional indigenous knowledge as inventive and intellectual, and, therefore, worthy of protection in all legal, ethical, and professional frameworks.
- Respect the right of privacy of informants and the confidentiality of information received.
- Respect local social values, traditions, and customary law and practice among the Aguaruna People when residing in their communities and at other times.
- Not deplete populations of biological material nor collect species suspected of being rare or endangered.
- Collect only the requisite amount of biological material needed for making plant and animal vouchers and extracting plant collections.
- Exhibit particular sensitivity in collecting of material used by the informants, particularly when cultivated in home gardens and often in limited supply.
- Be respectful of traditional Aguaruna medicinal information and practice, mindful of potentially striking differences between Aguaruna medicine and western medicine.
- Collaborating Organizations and Communities are entitled to seek exclusion from collection activities with an individual or institution that commits a serious or fundamental breach of the code.
- Be respectful of the taboos and spiritual aspects of the Aguaruna People with regard to genetic resources and know-how.
- Be respectful when collecting information regarding the treatment of women, particularly when women healers do not wish to disclose information to men. In this regard, such information shall only be provided to ICBG women investigators.
- All information collected regarding the practices or innovations of the Aguaruna People, relevant to the means for the preparation of compounds, infusions, or poultices, etc., shall not be disclosed to third parties, nor utilized for the development of any product without the prior consent of the Collaborating Organizations.
- The investigators shall maintain a closed-access database of the knowledge, innovations, and practices of Aguaruna Peoples collected during the course of the ICBG Project. Access to the database shall be on a need-to-know basis and shall be restricted to that necessary in order to achieve effective realization of the project's ends.

SUMMARY OF INTELLECTUAL PROPERTY NEEDS AND EXPECTATIONS

1. Recognition of collective creativity and property.
2. Modalities for TK protection that do not prevent sharing and other transmission of TK.
3. IP assistance and advice on documentation projects
4. IP advice and assistance in the negotiation, drafting and enforcement of access and other contracts.

Notes

---

[1] For example, at the meeting with representatives of the *Confederación de Nacionalidades Amazónicas del Perú (CONAP)* (Confederation of Amazonian Nationalities of Peru), Lima, May 11,1999, and of the *Asociación de Defensa y Desarrollo de las Comunidades Andinas del Perú. (ADECAP)* (Association for the Defense and Development of the Andean Communities of Peru), May 13, 1999.

[2] Meeting with Mr. César Sarasara, President, *Confederación de Nacionalidades Amazónicas del Perú (CONAP)* (Confederation of Amazonian Nationalities of Peru), Lima, May 11, 1999.

[3] Meetings with Mr. Jorge Noriega, *Centro de Estudios y Promoción del Desarrollo (DESCO)* (Center for Development Studies and Promotion), Lima, May 11, 1999, and with Mr. César Sarasara, see above.

[4] Meetings with Mr. Mario Álvarez, *Asociación de Defensa y Desarrollo de las Comunidades Andinas del Perú. (ADECAP)* (Association for the Defense and Development of the Andean Communities of Peru), and with Mr. Wrays Pérez, *Asociación Interétnica de Desarrollo de la Selva Peruana (AIDESEP)* (Inter-Ethnic Association for he Development of the Peruvian Rain Forest), Lima, May 13, 1999.

[5] Meeting with Mr. Erik Pajares, *Centro para el Desarrollo del Indígena Amazónico* (*CEDIA*) (Center for the Development of Amazonian Indians), Lima, May 13, 1999.

[6] Meetings with Mr. Mario Álvarez and Mr. Wrays Pérez. Lima, May 13, 1999. See above.

[7] Meeting with Mr. Alejandro Argumedo, *Asociación para la Naturaleza y el Desarrollo Sostenible* (Association for Nature and Sustainable Development) and Indigenous People's Biodiversity Network (IPBN), Lima, May 12, 1999.

[8] Meeting with Mr. Mario Álvarez. See above.

[9] Meeting with Mr. Wrays Pérez. See above.

[10] Meeting with Mr. Alejandro Argumedo. See above.

[11] Wari is one of the largest Pre-Inca civilizations in pre-Columbian South America. Its center was in the present day region of Ayacucho, Perú (some 450km. Southeast of Lima).

[12] Meeting with Mrs. Tarcila Rivera, *Centro de Culturas Indias Chirapaq* (Chirapaq Center for Indian Cultures), Lima, May 13, 1999.

[13] Meeting with Mr. Guillermo Arévalo, *Instituto de Difusión e Investigación de la Medicina Amazónica (IDIMA)* (Institute for the Dissemination and Research of Amazonian Medicine), Lima, May 13, 1999.

[14] Meeting with Mrs. Tarcila Rivera. See above.

[15] Meeting with Mr. Lelis Rivera, *Centro para el Desarrollo del Indígena Amazónico* (*CEDIA*) (Center for the Development of Amazonian Indians), Lima, May 13, 1999

[16] Meeting with Mrs. Tarcila Rivera. See above.

[17] Meeting with Mr. Mario Álvarez. See above.

[18] Meeting with Mr. Miguel Holle, *Centro Internacional de la Papa (CIP)* (International Center for Potatoe), Lima, May 10, 1999.

[19] Meeting with Mr. Mario Álvarez. See above.

[20] Meeting with Mr. Guillermo Arévalo. See above.

[21] Meeting with Mr. Guillermo Arévalo. See above

[22] Meetings with Mr. Mario Álvarez and with Mr. Wrays Pérez. See above.

[23] Meeting with Mr. Wrays Pérez. See above.

[24] Meeting with Mr. Miguel Holle. See above.

[25] Meeting with Mr. Alejandro Argumedo. See above.

[26] Meeting with government authorities at the Ministry of Foreign Affairs, May 10, 1999.

[27] *Decisión 391 de la Comisión del Acuerdo de Cartagena; Régimen Común sobre Acceso a los Recursos Genéticos.*

[28] *Ley sobre la Conservación y el Aprovechamiento Sostenible de la Diversidad Biológica;* Law No. 26839, of 1997.

[29] *Propuesta de Régimen de Protección de los Conocimientos Colectivos de los Pueblos Indígenas.* The draft law was published for comments in the Official Newspaper "El Peruano", on October 21, 1999, and subsequently on August 31, 2000. The text can be accessed at the INDECOPI website at www.indecopi.gob.pe

BEST COPY AVAILABLE

Annex 1

Decision 391 of the Andean Community

The Andean Community, established in 1969, comprises five Member Countries, namely Bolivia, Colombia, Ecuador, Peru and Venezuela. The highest body of the Andean Community is the Commission. It is mandated to adopt legislation that is binding on the Member Countries, on matters relating to the development and coherence of the Andean common market. Andean common legislation issues mainly in the form of Commission "Decisions".

A Common Regime on Access to Genetic Resources was established by Decision No. 391 (hereinafter "Decision 391"). It includes provisions that deal with TK relating to genetic and biological resources. The preamble of Decision 391 recalls that the Andean countries are multi-ethnic and pluricultural, and recognizes that the knowledge, innovations and practices of the native, Afro-American and local communities associated with the genetic and biological resources, have a strategic value in the international context. It also recognizes the historic contribution made by the native, Afro-American, and local communities to the biological diversity, its conservation and development, and the sustainable use of its components, as well as the benefits generated by that contribution.

For the purposes of access to genetic resources, Decision 391 defines "intangible component" as any valuable knowledge, innovation, or individual or collective practice, associated with a genetic resource, its by-products or the biological resource in which they are contained, regardless of any protection by intellectual property rights. It also establishes the right and authority of native, Afro-American and local communities to decide in respect of their knowledge, innovations and traditional practices associated with genetic resources and their by-products.

Decision 391 lays down the procedure to obtain authorization to access and use genetic and biological material originating in the Andean countries. The procedure starts with an application by the party(ies) wanting the access, which is published for public scrutiny and comments. Following acceptance of the application, an access contract is drawn up, to which the applicant and the Member Country concerned are parties. The contract must take into account the interests and rights of the providers of the genetic or biological resources, and of any relevant intangible component. If access is requested to resources or related by-products in conjunction with an intangible component, the contract must include an annex providing the terms and conditions for the distribution of benefits deriving from the use of that component.

---

[30] Meeting with Mr. Lelis Rivera, Executive Director, *Centro para el Desarrollo del Indígena Amazónico* (Center for the Development of Amazonian Indigenous Peoples), May 13, 1999.

[31] Meeting with Mr. Alejandro Argumedo, and Mr. Miguel Holle. See above.

[32] Meeting with Mr. Erik Pajares, see above, and with representatives of the *Confederación de Nacionalidades Amazónicas del Perú (CONAP)* (Confederation of Amazonian Nationalities of Peru), Lima, May 11,1999. Information also provided by Mr. Brendan Tobin, Coordinator, Association for the Defense of Natural Rights (ADN), Lima, Peru.

[33] Idem.

[34] Idem.

[35] Quechua is a family of native South American languages, and was the basic language of the pre-Columbian Inca civilization. It is presently spoken mainly in the mountain areas of Ecuador, Peru and Bolivia.

[36] Meeting with Mr. Mario Álvarez. See above.

[37] Decision 391, Articles 1 and 7, respectively.

Decision 391 establishes enforcement mechanisms and sanctions for non-compliance with its procedures. Unauthorized access to genetic or biological resources, or the associated traditional knowledge is actionable. Any person carrying out transactions with regard to by-products of such genetic resources or products synthesized therefrom, or in respect of the associated intangible components, that are not covered by an access contract, is liable to sanctions including fines, confiscation of infringing material, temporary or definitive closing of establishments and disqualification from future access to biological material. Additionally, access to biological resources may be suspended, cancelled or revoked, compensation for damages may be required, and other civil and criminal sanctions may apply.

The Member Countries may not acknowledge intellectual property rights on genetic resources, by-products or synthesized products, or associated intangible components obtained or developed on the basis of biological or genetic resources accessed in a manner inconsistent with the provisions of Decision 391. The Member Country concerned may bring action to invalidate such rights in the countries where they have been granted. The IP Offices of Member Countries are required to obtain from patent applicants the registration number of the access contract and a copy thereof where the claimed product or process has been obtained or developed on the basis of genetic resources originating in one of the Member Countries.

Law for Conservation and Sustainable Use of Biological Diversity

The Law for Conservation and Sustainable Use of Biological Diversity entered into force in 1997 with a view to facilitating compliance with the Convention on Biological Diversity. The Law recognizes the importance and value of native communities' knowledge, innovations and practices for the conservation and sustainable use of biological diversity (Article 23). It also recognizes the need to protect that knowledge and to establish systems to promote its use under the principles of prior informed consent and fair and equitable distribution of benefits deriving from that use.

The Law provides that native communities' knowledge, innovations and practices associated to biological diversity are part of the cultural heritage of those communities (Article 24). Native communities are therefore entitled to decide on the utilization of their traditional knowledge. Scientific research on the knowledge, conservation and industrial and medicinal application of genetic resources, through both traditional and modern biotechnology, is declared a priority of national public interest (Article 26).

Annex 2

Highlights of the Biological Collecting Agreement and the Know-how License

Biological Collecting Agreement

Collaborating communities and know-how. Aguaruna communities cooperate with WU, Museo and UPCH in the identification of medicinal plants and their uses for medicinal purposes. WU, Museo and UPCH undertake not to request, accept or otherwise obtain know-how or medicinal plants with historic use for medicinal purposes that are available within the collection area from any person, institution or organization other than the collaborating communities. Any such know-how or medicinal plants obtained from other persons, institutions or organizations not members of the collaborating communities must be returned to the providers or destroyed, and any written record of such know-how must be transferred to CONAP for return to the providers.

Prior informed consent. The individual or individuals providing the know-how, and the elected community leader, must sign an informed consent form, in Spanish and Aguaruna languages, prior to communication of know-how or of medicinal plants. Evidence of community collaboration is documented by the approval of the relevant community assembly as recorded in the minutes of the assembly, by a signature by the Apu (leader) and a representative of the project. The field coordinator also signs the form to the effect that confirmation has been obtain from the leaders of the collaborating communities prior to accepting their collaboration. Information regarding the historic use of medicinal plants may not be collected before the informed consent form is complete. That information must be held in confidence until protection is established or a release obtained.

Use of medicinal plants, plant extracts and know-how. The right of WU, Museo and UPCH to use transferred medicinal plants, plant extracts and know-how terminates on the date of termination of the know-how license. However, research activities of a non-commercial nature being carried out by WU, Museo and UPCH on the date of termination may continue, but this does not entitle any publication of confidential information of collaborating communities, including know-how, nor the application for intellectual property rights over any product, process or new plant variety without prior informed consent. On termination of the know-how license WU, Museo and UPCH must return, destroy or otherwise dispose of all transferred medicinal plant collections, plant extracts and know-how, and to terminate any ongoing commercial R&D activities related thereto, with the exception of biodiversity and voucher collections deposited in museums for scientific study.

Collection area restriction. WU, Museo and UPCH undertake not to elicit or otherwise obtain information regarding tangible or intangible resources from any individuals or communities other than the collaborating communities and individuals from those communities. In the event of receipt of any know-how from non-collaborating communities, such information must be treated as confidential information of the Aguaruna People, and the know-how is deposited with CONAP who must return it to the providers. Except as provided in the know-how license, the know-how may not be used for commercial purposes.

Ownership of resources. Plants collected for extraction and extract samples provided for use in screening programs of WU, UPCH or Searle remain the property of the Aguaruna people, subject to Peru's sovereign rights over its biological resources. The knowledge of plants, plant parts and preparation methods used for medicinal purposes are the property of the Aguaruna people. Those intangible resources are recognized as historic assets of the Aguaruna people. Museo is given the right to maintain collections of those plants and distribute them to internationally renowned herbaria and museums, but may not use or allow to be used those collections for commercial purposes. Publications of scientific or educational nature are permitted, provided that such publications may not include confidential information, including know-how, of the collaborating communities without prior informed consent.

Reporting. WU, UPCH and Searle must provide information to CONAP on advances made in the investigation of the chemical and screening analysis of the plant extract collections, including information as to their potential commercial value. While the publication of non-confidential scientific material is encouraged, the publication of confidential information, including know-how, not in the public domain requires the prior informed consent of the collaborating communities.

Collection fees. Searle must pay the collaborating organizations a collection fee for each medicinal plant collection, but not less than a minimum fee per annum.

Royalty Payments. Searle must pay royalties to WU, UPCH, Museo and the collaborating organizations on the basis of net sales of licensed products. The rate of the royalty depends on the greater or lesser lead value added during the plant extract screening process. Licensed products are defined as products developed by Searle on the basis of plant or plant extracts obtained through the agreement, or created through the direct or indirect use of know-how disclosed by the collaborating organizations or members thereof.

Use of funds. Royalties, fees and other payments are paid to a joint account of the collaborating organizations. These funds are to be used by the collaborating organizations to ensure equitable sharing of benefits among the Aguaruna people through projects to promote education, health, conservation, and sustainable management of natural resources.

Ownership of inventions and patents. Inventions made or developed under the agreement belong to the inventor(s). If medicinal plants, plant extracts or know-how of the Aguaruna people are directly or indirectly utilized in the development of an invention, the resources of the Aguaruna people must be recognized, and written consent of the collaborating organizations must be obtained prior to filing of a patent application. Any application for a patent on a product developed for the same or similar purposes as the historic use by the Aguaruna people must clearly recognize the role of the Aguaruna people in the invention contained in the application.

Confidentiality. Information and materials exchanged between the parties, not covered by specified exceptions, are regarded as confidential information. Their use and communication to third parties is restricted accordingly.

Collaboration and training. The agreement provides for the exchange of knowledge and expertise to achieve the goals of the agreement. Training among the collaborating communities is envisaged, and students therefrom are encouraged to apply for scholarships to attend the universities participating in the project. Field courses and workshops in collection and other practices are to be held for the collaborating communities. Collaborating organizations and INDECOPI (the Peruvian Intellectual Property Institute) will receive database software to store and search ethnobotanical and ethnomedicinal information.

Code of conduct. WU, UPCH, Museo undertake to carry out their activities under the project in a manner consistent with the highest standards and codes of ethics proposed by the International Society of Ethnopharmacology, the Society of Ethnobiology and the Society of Economic Botany. They also agree to abide by a Code of Conduct annexed to the agreement, in respect of the collection of biological materials and ethnobotanical information, and the recognition of IP rights. (See Box "Agreed Code of Conduct).

Cultural conservation. The ICBG members expressly agree to comply with Article 8(j) of the Convention on Biological Diversity.

Ethical obligations in relation to genetic resources. The ICBG participants undertake not to collect or accept any samples of genetic material of human origin for commercial exploitation. They also undertake not to use the know-how of Aguaruna people for research or development of new plant varieties or other living organisms, and not to apply for any patents, breeders rights or other IP rights over any new plant

174

varieties or other living organisms developed using medicinal plants, plant extracts and know-how of the Aguaruna people without their prior informed consent. Such consent may not be unreasonably refused, but refusal based on ethical beliefs of the Aguaruna people may not be considered unreasonable.

Know-how License Agreement

Definition of know-how. Know-how is defined as the knowledge, innovations, practices, expertise and secrets of the Aguaruna and Huambisa peoples with regard to the use of biological resources for medical purposes.

Definition of licensed product. A licensed product is any natural or synthetic product, process, method or commercially valuable pharmaceutical substance or composition developed by Searle or its partners on the basis of plant or plant extracts obtained through the biological collection agreement, or created through the direct or indirect use of know-how disclosed by the collaborating organizations or their individual members.

Grant of license. The collaborating organizations (CONAP, OCCAAM, FAD and FECONARIN) grant a non-exclusive license to Searle to use the know-how of the Aguaruna and Huambisa peoples to make, use, sell, offer for sale and import licensed products. The know-how may not be used for commercial, scientific or R&D purposes, except as provided in the license agreement. Sub-licensing by Searle is allowed only to an affiliate of Searle, to third parties for the purposes of screening, to universities, hospitals, pharmacists and physicians for evaluation, testing or commercial distribution and use of the licensed products, to contract manufacturers engaged to make the products for sale, and to WU and UPCH.

License fees. Searle paid the collaborating organizations a license execution fee at the signing of the agreement, and must pay a fixed annual fee while the license remains in force. License fees are adjusted annually in line with inflation on the basis o the Consumer Price Index (CPI) in the United States of America.

Milestone payments. Milestone payments are due by Searle where the development of a licensed product reaches commercial stages. Such payment are due upon filing of an investigative new drug application, or a new drug application, for a licensed product with the United States Food and Drug Administration.

Royalty Payments. Searle must pay the collaborating organizations a royalty on the basis of net sales of licensed products. For each licensed product that becomes covered by a patent granted in any country, royalties must be paid for sales of licensed products in that country from the date of the first sale throughout the life of the patent and for five years after its expiration. For each licensed product that is not covered by a patent, royalties must be paid for sales during 20 years from the date of the first sale.

Intellectual property rights. Any patent applications for licensed products must include full details of the resources utilized and their traditional use by the Aguaruna and Huambisa peoples as disclosed to Searle. Inventorship is determined by the applicable laws or treaties. If an Aguaruna or Huambisa person qualifies as an inventor, he must be included as such in any relevant patent applications. Searle has a right of first refusal in the event the rights of such Aguaruna or Huambisa inventors are to be assigned or an exclusive license is to be granted.

License to collaborating organizations. Searle grants the collaborating organizations a non-exclusive license under the patents issued to Searle for licensed products. Such license is only for R&D purposes in products and processes for the conservation and sustainable use of biological resources, not for any commercial use. Any unpublished and unpatented information, innovations and inventions developed by the collaborating organizations under this license is regarded as included within the know-how license already granted to Searle, and payment therefore is covered by the royalties and fees agreed under the know-how license. Searle has a right of first refusal in respect of patents or other rights received by the collaborating organizations on products or processes based on the R&D allowed by the license granted to them by Searle.

Freedom for traditional uses. Aguaruna and Huambisa indigenous peoples are free to continue making and selling their traditional medicinal products for use in their traditional methods. However, products and methods patented by Searle on the basis of licensed products are not regarded as being traditional medicinal products.

Privacy and publicity. Searle may not make any promotion of any product, including advertising and press releases, that incorporates, information regarding the Aguaruna and Huambisa peoples, or any visual representation thereof or of the Peruvian Amazon without prior written consent. The parties must agree on the manner in which the role of the Aguaruna and Huambisa peoples will be acknowledged in connection with the know-how license agreement.

FFM to South America
Mission to Bolivia

BOX 1. BOLIVIA FFM: COUNTRY MEMBERSHIP IN INTERNATIONAL IP TREATIES

International IP Treaties	
Paris Convention	1993
Berne Convention	1993
Rome Convention	1993
Madrid Agreement	-
The Hague Agreement	-
PCT	-
UPOV Convention	1999
TRIPS Agreement	2000

BOX 2.: BOLIVIA FFM: COUNTRY MEMBERSHIP IN TK-RELATED TREATIES AND PROCESSES

TK-related treaty/process	
UNESCO Heritage Conv.	1976
UNESCO Cul. Property	1976
ILO 169	1991
IUPGR – FAO	Yes
CBD	1994
UNCCD	1996

The FFM to Bolivia took place from November 17 to 19, 1999, in the cities of La Paz and Tiawanaku. The Interim Mission Report, which lists the persons and entities consulted, can be found in Annex 4.

The presentation of the information in this section is organized under the following headings: Methodology; Genetic Resources and Associated Medicinal Knowledge; Folklore and Handicrafts; Cultural Heritage; and Implementation of Bolivia's International Obligations in the Field of Intellectual Property and Other Institutional Matters.

Methodology

The FFM to Bolivia was a natural sequence to the FFM to Peru, given the cultural and historical similarities between the indigenous communities of the two countries. Since the section on the FFM to Peru has already covered general issues and concepts of TK in the context of the Andean region, this part focuses on specific aspects of the concerns of indigenous communities in Bolivia as regards intellectual property protection of TK. Four main areas have been identified: genetic resources and associated medicinal knowledge; folklore and handicrafts; cultural heritage; and implementation of Bolivia's international obligations in the field of intellectual property and other institutional matters.

Genetic Resources and Associated Medicinal Knowledge

Bolivia has a number of different geographical settings, from the dry high plateau in the center and north of the country, to the rain forests in the northeast. This geographical contrast has generated a very rich biological diversity, which the indigenous communities have learnt to use in a sustainable manner many generations ago. In managing biological resources indigenous communities have modified a large number of them so as to increase their output and resistance to adverse factors; indigenous communities have also acquired vast knowledge on the practical utilization of those resources.

There is a general concern involving intellectual property rights in biological resources. Indigenous communities in Bolivia have contributed to improve varieties of quinoa, which is a very important food staple in the region. The notice that researchers from a United States university had obtained a patent in the U.S. for a variety of Apelawa quinoa (an asexually reproduced variety), which had allegedly been developed by indigenous communities, gave rise to complaints against "biopiracy". Apparently the patent has been cancelled for the lack of payment of maintenance fees, yet the concerns did not vanish. The same claims were made regarding *la evanta* and *el yagué*, local plants with therapeutic properties. Participants stated the fear that patent protection for plant varieties modified by indigenous communities of Bolivia in foreign countries would probably impair their capacity of exporting agricultural products derived from those varieties. On the other hand, there was a risk that further improved varieties would be developed in countries like the United States and later imported into Bolivia at higher prices.[1]

IP NEEDS AND EXPECTATIONS #1
Protection against unauthorized use

IP NEEDS AND EXPECTATIONS #2
Integration into the formal system of health care

Even though the economic risks of importing improved varieties are nonexistent due to the fact that indigenous communities may always utilize the original ones, the concern with unauthorized research on and commercial use of plant and animal varieties developed in Bolivia is shared by all communities.

On the other hand, the risk of losing biodiversity is a serious threat to traditional agriculture. In Bolivia traditional farmers have developed knowledge concerning the use of more than four hundred varieties of potatoes. The eventual introduction of genetically modified varieties might propagate uncontrollably and alter the traditional characteristics of local varieties.

Indigenous communities in Bolivia have developed extensive information on the practical application of genetic resources, in the field of agriculture and medicine. The community of the Kallawayas, of *Provincia Bautista de Saavedra*, department of La Paz, is particularly renowned for the medicinal knowledge that its shamans developed and preserved for many centuries, to the point they were known as "the doctors of the Incas." The expectations of indigenous communities in this area are two-fold: protection and preservation of knowledge, so as to enable sharing of the benefits arising from their utilization; and integration of that knowledge into the formal system of health care.[2]

Indigenous communities are not familiar with mechanisms of intellectual property protection, but they have a sense that it is necessary to protect its economic and spiritual value by some means of appropriation. Even from a historical perspective such sense has always existed. Indigenous communities have had a tradition of sharing general knowledge with other communities, but specific pieces of information, in particular those associated with religious practices and beliefs, have always been kept confidential. This explains why some communities have developed and maintained a higher degree of knowledge or expertise in some specific areas.

Protection of traditional knowledge would, therefore, promote confidence in holders, and encourage them to transfer it to others, including researchers and companies from industrialized countries, so that new practical applications of genetic resources could be developed and disseminated.

At the same time, indigenous communities, which for so long have relied on traditional medicine, not only for preventive purposes, but also with curative effects, would like to have it integrated into the national system of health care. What traditional communities expect, in this context, is that citizens receive government support when seeking assistance from traditional medicinal knowledge holders. Furthermore, the government has been asked to promote capacity building in remote communities, so that medicinal knowledge holders can be trained to provide efficient and safe assistance to patients. Courses on traditional medicine should also be incorporated into the curricula of medical schools.[3]

Indigenous communities in Bolivia have also developed vast knowledge and experience in agricultural management. Continued selection of seeds, improvement of irrigation and soil conservation methods have permitted traditional farmers to obtain an adequate agricultural output which has permitted the communities to reach a balanced and sustainable agriculture in spite of a difficult and extremely diverse environment. On the other hand, plant varieties with tested or potential applications in food, agriculture and medicine were being described and, for the first time, the indigenous persons who held the knowledge on their use were being identified as authors.[4] Documentation, however, raises some problems as discussed below.

Folklore and Handicrafts

Indigenous communities in Bolivia have developed a very rich folklore in all areas, and particularly in music and literature. Techniques of manufacturing and decorating textiles have also reached a very high level of sophistication and artistic conception.

The participants in meetings with WIPO invariably claimed that traditional music was the subject of misappropriation by unauthorized third parties which not only used it but modified its essential characteristics. Indigenous communities had developed different types of rhythms according to each specific agricultural season. At the beginning of each season, a different type of music would be performed in festivities and rituals. Traditional music, therefore, had a spiritual dimension that was being lost, as urban artists (foreign and nationals artists alike) were incorporating it into modern compositions. The most obvious example of such mischaracterization was that currently, compositions were performed at any time of the year, irrespective of their spiritual connection with a particular season. Ironically, urban musicians were entitled to copyright protection. Indigenous communities, the true authors of authentic indigenous music, were not.[5]

Multiple legal problems that arise from traditional textiles were identified throughout the mission, but three in particular are noteworthy. Firstly, some textiles have been used for generations as objects of cult. Loosing the material objects, therefore, means losing important elements of traditional culture. Since many sacred textiles have been stolen and smuggled to foreign countries, efforts have been made in order to locate and repatriate them.[6]

IP NEEDS AND EXPECTATIONS #3
Location and repatriation of stolen sacred textiles

IP NEEDS AND EXPECTATIONS #4
Adequate remuneration of the labor of artisans (mostly women)

IP NEEDS AND EXPECTATIONS #5
Protection against free copying of techniques, patterns and designs

Secondly, indigenous communities have a strong feeling that the lack of mechanisms for the appropriation of creative efforts in the area of textiles has impaired the possibility of their obtaining an adequate remuneration for their labor. Textiles that take days, if not weeks, of intensive, complex and creative work are sold on the market at extremely low prices. A legal mechanism that could ensure protection against copies and imitations would enable artisans, who are mostly women, to capture an adequate compensation for their efforts, thus helping alleviate the extreme povertymany communities live in.[7]

Thirdly, there is a general feeling of the unfairness of a system that allows persons, including foreigners, who have no connection whatsoever with the culture of Bolivian communities, to freely copy motives, drawings and styles of both profane and ritual textiles. Traditional communities should enjoy rights in their creations so that they could reap the benefits thereof, while preserving values, traditions and beliefs.

BEST COPY AVAILABLE

Cultural Heritage

Knowledge, traditions, culture, beliefs, arts, all these are aspects of the cultural heritage of indigenous communities which are received from the previous generations, transformed and enriched, and assigned to the next generations. Although the cultural heritage of Bolivian communities has multiple manifestations, its apex is viewed by the Aymara community as being the buildings of Taypiqala-Tiwanaku, which they do not view as ruins but as their sacred *Wak'a*, a sacred place with religious meaning.[8]

A huge effort by some organizations, such as the *Taller de Historia Oral Andina (THOA)*, has been dedicated to document, preserve and disseminate cultural traditions through radio broadcasts, video tapes and publications.[9] Preservation of the cultural heritage of Bolivian indigenous communities encompasses a process that THOA has designated as "reconstitution of the *ayllus*", which means the assumption of a cultural identity and a work of administrative organization at the local level. The work concerning organization has relied mainly on the establishment of titles to the lands occupied by the communities. However, it is not forgotten that a relevant portion of the cultural heritage of communities consists of traditional knowledge. The adoption, both at the national and international levels, of mechanisms of intellectual property protection of such knowledge, therefore, is seen as a relevant tool for the conservation of the cultural heritage of indigenous communities.

Implementation of Bolivia's International Obligations in the Field of Intellectual Property and Other Institutional Matters

Bolivian legislation has had provisions on protection of traditional knowledge since 1992. The Copyright Act dedicates three articles (articles 21 through 23) to the protection of folklore and handicrafts. In addition, articles 58 through 62 established a paid regime for works authored by Bolivian citizens in public domain, including folkloric and traditional works of unknown authorship.

It is clearly understood by Bolivian authorities, however, that copyright protection for traditional knowledge is not sufficient, given that a relevant part of that knowledge, including genetic and other biological resources, has industrial applications, the protection of which must also be based on a concept of industrial property.

COPYRIGHT ACT (NR. 1322) OF APRIL 13, 1992

- Protection of folklore and handicrafts (through systems of national heritage (paid public domain) and works of applied art, respectively) [articles 21, 22 and 23]
- National heritage and paid public domain [articles 58, 59, 60, 61 and 62]

Most obligations of Bolivia under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement), of the World Trade Organization (WTO), have been implemented, even before the expiry of the transitional periods, through the adoption of legislative measures at the level of the Andean Community, of which Bolivia is one of the five members. Decision Nr. 344 (covering patents, trademarks, geographical indications and unfair competition) is being revised in order to make it TRIPS-compliant.[10] Moreover, the Andean Community has established a common regime on access to genetic resources (Decision 391[11]), which has direct implication on protection of biodiversity-related traditional knowledge and sharing of benefits derived therefrom.

An Intergovernmental Working Group has been established to revise the laws of Bolivia with the view to implement TRIPS obligations.

On the other hand, the authorities of the government of Bolivia are aware that there is the need for an instrument dealing with protection of traditional knowledge. The strategic option has been to develop a national proposal and submit it to the Andean Community so that a uniform regional approach can be developed. With that in view, some activities have been undertaken, such as a survey of the situation of traditional knowledge in the low lands of Bolivia. A similar survey in the high lands was being organized. Both surveys are of relevance to the framework provided for by the eight transitional provision of Andean Decision Nr. 391, on Access to Genetic Resources. Furthermore, a national seminar on the "Protection and Rights of Traditional and Peoples' Cultures in Bolivia", sponsored by the national and the local governments, had taken place at Oruro, on December 3 to 5 of 1998.

Government authorities were also fully aware that traditional knowledge and genetic resources can be protected only where they are adequately documented. Documentation, however, raises specific problems arising from the lack of legal mechanisms to protect such knowledge. Documentation, in the sense that it implies disclosure, impairs an eventual intellectual property protection that is based on novelty or secrecy, such as patents, plant varieties, industrial designs and trade secrets. On the other hand, such concerns could not prejudice the continuation of documentation efforts, such was the urgency of the task, given that knowledge was being lost at a very rapid pace. There was, therefore, the need for striking a balance between the urgency of documenting and the need to preserve the possibility of acquiring rights.

SUMMARY OF INTELLECTUAL PROPERTY NEEDS AND EXPECTATIONS

1. Protection against unauthorized use.
2. Integration into the formal system of health care.
3. Location and repatriation of stolen sacred textiles.
4. Adequate remuneration of the labor of artisans (mostly women).
5. Protection against free copying of techniques, patterns and designs.

Notes

---

[1] Discussion with CONAMAQ – *Consejo Nacional de Ayllus y Markas del Qullasuyu*, on November 18, 1999.

[2] Bolivian traditional care providers founded in 1984 the Bolivian Society of Traditional Medicine (*Sociedad Boliviana de Medicina Tradicional* – SOBOMETRA). In 1987 the Bolivian Institute of Kallawaya Traditional Medicine was created by a Presidential Decree. SOBOMETRA has established cooperation agreements with some governmental agencies, such as the Ministry of Social Security and Health Care and the Ministry of Planning and Coordination.

[3] Interview with Dr. Walter Alvarez Quispe, President of SOBOMETRA, on November 18, 1999.

[4] Interview with Mrs. Teresa Ortuño Limariño, of the *Herbario Nacional de Bolivia, Instituto de Ecologia*, on November 19, 1999.

[5] Another irony noted by participants was that sometimes poor indigenous persons were caught by authorities selling pirated cassettes and records on the streets of La Paz, and the pirated goods seized. The irony was that most of the seized materials contained folk music interpreted and performed by urban artists, when the real authors, the indigenous communities, had never been compensated. Meeting with CIDOB (*Confederacion de Pueblos Indigenas de Bolivia Unidos y Organizados*) on November 17, 1999.

[6] Interview with Ms. Christina Bubba Zamora, of *Movimiento Cultural para Seguir Sembrando para Seguir Soñando*, in La Paz, Bolivia, on November 17, 1999. The efforts of Ms. Bubba Zamora regarding the restitution of ritual textiles to Bolivian communities have been internationally recognized. In 1998 she received the *Premio Rolex a la Iniciativa*.

[7] Meeting with CONAMAQ – *Consejo Nacional de Ayllus y Markas del Qullasuyu*, on November 18, 1999.

[8] Meeting with the Mallcus of Tiawanaku, on November 19, 1999.

[9] Meeting with the THOA, on November 19, 1999.

[10] Decision Nr. 344 was replaced with Decision Nr. 486, of September 14, 2000.

[11] The main provisions of Decision 391 are described in the section dedicated to the FFM to Peru.

BEST COPY AVAILABLE

FFM to the Caribbean Region

Box 1. FFM to the Caribbean Region: Country Membership in international IP treaties

International IP treaties	Trinidad and Tobago	Guyana	Jamaica
Paris Convention	1964	1994	-
Berne Convention	1988	1994	1994
Rome Convention	-	-	1994
Madrid Agreement	-	-	-
The Hague Agreement	-	-	-
PCT	1994	-	-
UPOV Convention	1998	-	-
TRIPS Agreement	2000	2000	2000

Box 2. FFM to the Caribbean Region: Country Membership in TK-related treaties and processes

TK-related treaty/process	Trinidad and Tobago	Guyana	Jamaica
UNESCO Heritage Convention	-	1977	1983
UNESCO Cultural Property	-	-	-
ILO 169	-	-	-
IUPGR – FAO	Yes	No	No
CBD	1996	1994	1995
UNCCD	-	1997	1997

The FFM to the Caribbean Region took place from May 30 to June 9, 1999. The mission visited the following countries: Trinidad and Tobago, Guyana and Jamaica. The Interim Mission Report, which contains information as to the persons and entities with whom WIPO consulted, is included in Annex 4.

The information in this section is presented under the following headings: Terminology and Subject Matter, Objectives of TK Protection, Benefits and Beneficiaries of Protection, Documentation, Means of Protecting TK, TK Protection in other Policy Areas, Management and Enforcement of Rights and Interests in TK, and General.

Terminology and Subject Matter

Although there is no agreed working definition of TK, the usage of the term has generally tended to cover the more scientific aspects of knowledge such as the use of plants for healing, agricultural techniques for farming and fishing, as opposed to the artistic forms of knowledge such as songs and dances which are largely classified as folklore.

In discussions in this region, the need for a commonly agreed definition for TK was identified. It was suggested that TK covers knowledge which has been handed down from generation to generation embodying practices which have been in existence over time.[1] The lack of a clear definition raises many other questions including " *when does knowledge become traditional?*"[2] An example is whether a practice which is readily identifiable as originating from a particular country relatively recently, and which is common to the people can be called TK and protected or protectable as such. An example of this is the steel pan musical instrument which is widely recognized as having originated in Trinidad and Tobago, acclaimed to be one of the greatest discoveries of this century and now used across the globe.[3]

IP Needs and Expectations #1
A commonly agreed definition of TK

In every country visited, TK, indigenous knowledge and folklore were used interchangeably to cover the same subject matter in the scientific and artistic spectrums. Folklore was regarded by some as a subset of TK.

The lack of a definition leaves the issue of the form of protection to be granted unclear and the range of subject matter identified for protection further highlights the need for a definition of TK. The subject matter identified includes:

- traditional usage of fruits, plants and animals for medicinal purposes;
- spiritual healing;
- traditional fishing methods;
- traditional birthing methods;
- traditional bone setting techniques;
- cultural heritage;
- folksongs, dances and dramas;
- rites and rituals;
- traditional psychiatry;
- religion[4];
- trapping, hunting and fishing techniques;
- traditional food culture and preservation techniques;
- handicrafts;
- traditional environmental preservation and conservation methods;
- language.[5]

The findings indicate that TK systems exist within the region although the majority of those interviewed feel that these knowledge systems are relied upon much less now due to modernization and westernization.

The application and applicability of IP principles to the protection of such knowledge is limited to only some of the subject matter identified and the WIPO delegation explained this point at discussions on several occasions. A clear example is the use of IP to protect spiritual knowledge and practices. A view which is strongly held and widely shared is that spiritual aspects of healing, (the use of prayers either alone or in conjunction with plants by " pundits"), knowledge which is considered to be divinely received, is a key component of TK in the region and should be protected. There were some pundits who stated however that these gifts of knowledge are self-protecting and that they could not *and should not* be subjected to strict principles of law, compartmentalized or regimented[6].

Cultural heritage and a "sense of community" were seen as subject matter which underpin the TK system of the country. TK defined within the context of culture was evident in the following statement:

> *"...culture is not dead... our cultural heritage is getting lost and there has always been the 'acceptable European culture' invading us-we must go back to the village which is the basis of the lives of our people be it here or from the countries where the settlers originally came from...."*[7]

In identifying the subject matter of protection, a concern was expressed about the need to avoid stripping away existing rights in the process of seeking protection for the so-called "new rights".

Objectives of TK Protection

The list of subject matter to be protected (see above) raises questions as to what the main objectives of IP protection of TK in the region are. The objectives could be classified under two main headings, both not mutually exclusive: Protection from unauthorized exploitation on the one hand and preservation and conservation on the other. Under the former, the objectives include the need for benefit sharing where TK exploitation results in benefits for the user, and acknowledgement of the TK holder and the country as the origin of the knowledge/practice. As to the latter, the objectives included the need to protect the integrity of TK or practices from distortion, ensure respect for the holders of such knowledge, preserve the cultural heritage of the people for future generations and preserve biological diversity. Protection and preservation cannot be clinically separated as protection by definition could contribute to preservation. However, the IP system can only offer direct protection by establishing rules and procedures under a legal regime. The extent to which these rules contribute to preservation would depend on other factors, not least the efficacy of their implementation and enforcement.

Whilst most people were of the view that TK could and should benefit from the protection offered by the IP system, strong arguments were made against this view by others. The main argument against such protection was that TK and practices should be allowed to evolve as part of societal change. Some views expressed were to the effect that it would be antithetical to protect TK. To be sure, the word tradition itself is considered to be nebulous. The whole concept of tradition is seen to have *"....evolved and therefore now belongs to mankind and we would be moving backwards by defining specific owners...."*[8]. TK and folklore were viewed as being part of the public domain which should be available for all to share. An academic was of the view that there should be free flow for the advancement of human knowledge. One of the views expressed was that it was condescending to seek to protect TK or a community, singling a group out on the basis of their traditional practices, in this age.

IP NEEDS AND EXPECTATIONS # 2
Identification of IP aspects of TK

It was argued that once TK becomes proprietary, it would cease to be useful as "poor people" do not have the money to buy such knowledge-therefore it has to be exchanged for free. A view expressed was that *"..the knowledge must be left to be shared freely which has been the basis of survival of the holders of TK until now"*[9]

The need to distinguish the objective of protection was also raised-protection of (preservation/conservation) or protection against (illicit exploitation/unauthorized use)? However the consensus was that TK or folklore should not be used without acknowledgement of the real source.

Benefits and Beneficiaries of Protection

Acknowledgement and recognition of an individual, a community, or a country as the source of the knowledge formation or resource was identified by most of the people contacted as the most important benefit.

The equitable sharing of financial benefits derived from the use of knowledge formations was also identified but subordinated to the first as the majority view was that money was not the primary motivation for protection. The consensus was that where the knowledge is used for the common good and benefit of mankind without any financial benefits to the exploiter, there should be no financial reward. However, as in most cases, where exploitation was with a view to obtaining financial benefit, they felt that the source community should share in the benefit. The arguments were therefore not so much against use as against unauthorized exploitation.

A key element in the discussion on benefits of protection was what value to attribute to the knowledge formation and who should determine this. The holders of TK in the region for the most part do not have the know-how to exploit their knowledge commercially and the corporations who are able to do this save potentially on Research and Development costs if they use the information provided by the holders of TK. There is therefore potential for a mutually beneficial relationship although for the most part, the holders of TK perceive themselves to be at a disadvantage. There is little precedent on determining a basis for allocating benefits in this area but the use of contract law could be an immediate possibility (see section on Means of Protecting TK).

RECOGNITION AND VALUATION OF TK

The perception of traditional practices such as traditional healing methods by the new generation as archaic and ineffective is considered to have contributed to the erosion of such knowledge systems and the low value and esteem which the communities now attribute to it in the region. This is seen to impact on the overall value which TK holds within and outside the countries. However, the rapid growth of alternative medicinal practices in industrialized countries (largely based on traditional methods in developing countries) and the increasing interest in learning these "old ways" counters this argument. On the value of the use of traditional medicine, a view expressed was that *".... the younger generation do not want to know these things and are running to doctors."* [10] The value of TK is seen to include the potential for self-identity which it offers. Calls for the recognition of traditional medicinal knowledge (TMK) amongst orthodox practitioners especially in the medical field were made. This recognition and any resultant cooperation between the two groups could lead to a process of validating TMK and in turn contribute to research and development in this area.

It was acknowledged that there is insufficient scientific and technological know-how across the Caribbean region coupled with a lack of financial resources to facilitate Research and Development and subsequent commercialization. The need to cooperate with institutions, usually from abroad, which could provide these resources was widely recognized.

The resultant concern is the need to develop workable modalities for such cooperation. Leading from the identification of benefits is the all-important question: "who are the beneficiaries"?

In this region, the concept of ownership (and therefore beneficiaries of protection) as it relates to TK raised many questions with the historical facts surrounding the origin of the Caribbean people underlying the debate.

Most Caribbean people have their origins in Africa, Asia and South America. The discussions on this point centered around whether the Caribbean people could lay claim to benefits accruing from the use of knowledge which they brought with them from their countries of origin. The arguments were skewed in favor of the true beneficiaries being the source communities from which these knowledge systems originate. However, many recognized that the knowledge formations had evolved and that although they could have had roots in their countries of origin, they can now be identified with the Caribbean. Additionally, the fact that similar knowledge formations and resources are to be found in many countries in the region contributes to the complexities of the owner/beneficiary debate. To compound the issue, most of this knowledge is communally held. The extent to which community based rights can be protected and managed for the benefit of all especially in cases where the knowledge can be found in many countries was at the heart of the debate in every country visited.

Who should the beneficiary be? The individual who practices it? The community where the knowledge is found? The state? The region? The communities from which the people originate?[11] Some people were of the view that the only real indigenous knowledge which they could lay claim to in the Caribbean is the spiritual aspect.

Documentation

Documentation was repeatedly expressed as a primary need, pivotal to any efforts to recognize and protect TK. The potential benefits of such documentation were seen to include:

- the recording of existing TK
- recognition of the existence of such systems within the community
- preservation and conservation of the integrity of such knowledge
- provision of a basis for educational and research use
- provision of a basis for validation and valuation of TK
- provision of a basis for regulation and protection of the use of TK

IP NEEDS AND EXPECTATIONS #3
Development of modalities for cooperation between TK holders/owners and users to establish IP benefits

IP NEEDS AND EXPECTATIONS #4
Assistance with documentation

IP NEEDS AND EXPECTATIONS #5
Provision of advice on IP protection of documented TK

The difficulty with keeping culture alive with the proliferation of technology and the rapidly changing times was expressed as an impetus for documentation to ensure that the integrity of the practices is maintained before they evolve.[12] Examples were cited of people from outside the country making videos and documenting the life stories of one of the communities WIPO visited for their own benefits in the name of research.[13] It was suggested that a system of documentation agreed upon in cooperation with the community be developed to record all forms of traditional medicines and practices. This would serve the purpose of identifying these knowledge systems as existing in the community and belonging to it as well as providing a legacy for future generations.[14]

Examples of such documentation efforts include steps taken by the **National Herbarium** in one country[15], to document, classify and note the uses to which the herbs can be put[16] and an effort at **codification of songs** described as having the potential for "*...creating a basis for a philosophy which guides a lifestyle.*"[17] Another example is the effort by the **Rose Foundation**, a non-governmental organization, to develop a community museum and information center in **Moruga, Trinidad and Tobago,** to document the history, traditions and culture of the community. This community is considered by the Foundation "*.... to be at the heart of the tradition and history of the country but has not developed along with it*".[18]

A question which was posed during most of the discussions on documentation was: "Which should come first?" Documentation or Protection? The basis for this was the view that documenting the knowledge formations could amount to disclosure of the information as it becomes easily accessible for exploitation. On the other hand, documentation would facilitate the identification of subject matter that requires protection. WIPO's assistance and advice was sought on documentation and advice on its implications on the rights of holders of TK.

The consensus was that documentation is an important prerequisite for protection with views to the effect that it could possibly be addressed at a regional level through the secretariat of **the Caribbean Community and Common Market (CARICOM).** CARICOM was established by the **Treaty of Chaguaramas** which was signed by Barbados, Jamaica, Guyana and Trinidad & Tobago and came into effect on August 1, 1973. This

BEST COPY AVAILABLE

was the result of a 15-year effort to fulfil the hope of regional integration which was born with the establishment of the British West Indies Federation in 1958. CARICOM has 15 Member Countries and three Associated Members.[19] The mission of the secretariat of Caricom is "*To provide dynamic leadership and service, in partnership with Community institutions and Groups, toward the attainment of a viable, internationally competitive and sustainable Community, with improved quality of life for all.*"

Means of Protecting TK

Use of intellectual property

Given the mandate of the WIPO delegation on the FFM, the main focus of the discussions under this heading was the use of IP to protect TK. There were strong arguments against the utility of IP in this area and as a respondent put it:

> *"...[T]here is a built-in distrust of systems of inquiry (especially the formal and euro-centric) particularly in cases where cultural groupings are perceived to be weakened and open to exploitation by dominant cultures...".*[20]

One of the most often repeated criticisms of the IP system was a perception that it is inaccessible to people in developing countries.[21]

Another strongly argued point was that IP has led to the privatization of research and contributed to the commodification of knowledge. The IP system was seen as European in origin and as such not necessarily suitable or applicable to TK formations which originate from multicultural systems such as is present in the Caribbean. Developing countries they said, were ill-equipped to protect TK from exploitation and therefore stood to lose more if they took a protectionist approach, such as that offered by IP.

IP NEEDS AND EXPECTATIONS #6
Assistance with the modernization and strengthening of IP legislation

IP NEEDS AND EXPECTATIONS #7
Practical testing of the utility of the IP system in the protection of TK

The IP system was seen to have served little purpose in the protection of literary and artistic works (for example) in the Caribbean and the views were to the effect that its applicability/ "extension" to the uncharted area of TK would pose huge challenges.

Examples were cited of Caribbean poetry reportedly being used as the basis for songs by North American artists without acknowledgement or compensation.[22] All these statements were tempered with recognition of the need to take a pragmatic and feasible approach to addressing these issues, including using the IP system where possible.

Some of the lawyers with whom the WIPO delegation met acknowledged that the protection of TK has not yet been debated in legal circles in many Caribbean countries hence the lack of an articulate legal response to the issues raised.[23] However, the consensus was that despite the criticisms leveled at the IP system there was potential for using some elements of it for the protection of TK.

These include the use of **geographical indications** as a possible means of protecting TK-based inventions and resources. This was also considered as a possible tool for protecting TK and resources that exist across boundaries if a regional approach is taken to the problem.

Although **patents** were seen as an option, concerns were expressed regarding the prohibitive costs of obtaining them by people from developing countries. Examples were cited of inventors who had struggled without success to use the patent system due to crippling costs. It was reported that they sometimes had no choice but to enter into agreements with international corporations who can afford these costs. The issue of whether a TK-based invention could meet the "novelty" requirement (one of the four criteria to be met for an invention to be eligible for patentability) was also discussed. The question centered around whether an invention based on knowledge which had been used over time, could be considered to be novel.

The use of **petty patents** was proposed as a possible tool for the protection of informal inventions. Efforts to get this included in the laws were underway by the IP sub-committee of the Bar Association of one of the countries.[24]

The use of **trade secrets or undisclosed information** was also discussed as a possible tool for protecting TK whether under IP or under other administrative, commercial, civil or criminal law provisions or a combination thereof. The "right to say no" (withhold the information) was discussed in this context[25] and the argument was to the effect that given the socio-economic situation of most of the holders of these rights in the Caribbean, such a right did not really exist. This was because the lack of bargaining power of the holders of TK as compared to the might of the international companies (most often cited as the users of the knowledge sought to be protected) was seen as eroding this right. The use of trade secrets was also considered to be limited in its applicability because the information sought to be protected was usually communally held and generally known and as such could not strictly be considered to be a secret particularly as there are hardly any structures within the communities governing dissemination of such secrets.

The successful use of the IP system to protect TK in these countries is obviously dependent on their having modern IP legislation. The need to expedite development of basic IP legislation in countries that do not have such legislation and to review the laws in those countries where such legislation is "weak" or dated was also identified.

The use of "folklore" and "traditional knowledge" interchangeably to describe subject matter of protection was mentioned in the "Terminology and Subject Matter" section above. The similarity of the subject matter was not however borne out in the application of the **UNESCO/WIPO Model Provisions for National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions, 1982 ("the Model Provisions")** in the countries. The recognition of the possible use of the Model Provisions as a tool for the protection of TK was not directly proportional to the continuous calls for the protection of Folklore and the experiences in the three countries were different:

Jamaica has developed laws on the protection of folklore based on the Model Provisions (integrated into their Copyright Legislation, a common practice in developing countries).

In **Trinidad and Tobago**, probably the country with the most diverse population in the Caribbean, the need to develop legislation for the protection of folklore was raised at several meetings.[26] The protection of folklore was said to be high on the agenda of the Ministry of Legal Affairs and the need to develop legislation which addressed the needs of the people taking into account the different (but commonly shared) cultures and rights developing therefrom was emphasized. The WIPO delegation witnessed this diversity and shared culture at the Indian Arrival Day celebrations[27].

Guyana had no laws on the protection of Folklore and as part of these discussions, the need to develop modern IP legislation was raised. The chairperson of the working group[28] on intellectual property protection charged with this task promised to integrate the protection of Folklore and Traditional Knowledge into the scope of their work. A draft Copyright Bill was developed in 1999.

The possible use of copyright to protect the " Literary and Artistic" components of traditional knowledge was raised. The integration of the Model Provisions into the copyright laws of Jamaica is an example of such use.

Sui generis protection

Suggestions were made as to the possibility of developing *sui generis* laws to protect TK starting with the development of minimum criteria for protection. How such a system would work was not elaborated but it was clear that a requirement would be for simplicity and harmony with existing laws. This also relates to the resounding calls for new laws to regulate access to genetic resources (please refer to section on "Access to Genetic Resources and Benefit Sharing Mechanisms" below). Guyana has developed access regulations and the other countries visited were also discussing this possibility. Requests for comments on the regulations and the possibility of sharing experiences with other countries in the region or elsewhere who were also working along these lines were made. Upon request, the WIPO delegation provided examples of initiatives by countries in Africa, Asia and Latin America, to develop *sui generis* legislation for the protection of TK. It was also suggested that such laws should take the needs and customary practices of local communities into account rather than imposing laws which are often alien to the practices of most of the communities. The use of legal mechanisms to preserve culture and language were also advocated, for example, calls for minimum content of local programs in radio and television broadcasts[29]; and the compulsory use of the "patois" language (referred to earlier) in certain cases. Difficulties with the implementation, enforcement and monitoring of such laws and regulations was a key issue identified. Calls were also made for an international regulatory framework to guide access and benefit sharing in respect of genetic resources.

IP Needs and Expectations #8
Provision of IP advice/comments on draft *Sui generis* laws.

IP Needs and Expectations #9
Studies on the IP aspects of customary law and the development of IP type protection on the basis of customary law

Customary law and practice

Community practices are considered to be at the core of TK and these in turn translate into customary practices which form the basis of customary law. The issue as to when a practice becomes customary practice, though not discussed, is one which underpins the discourse in this situation where only a few countries in the region were visited. Information received is therefore not necessarily reflective of practice which is common to all the communities in one country or to the region as a whole. Secrecy was identified as one of the ways to prevent access to their knowledge and this is recognized as a customary practice as it is widely used in the community, particularly by those who practice traditional medicine (See also sub heading on the use of Trade secrets under the section "Means of Protecting TK"). The importance of recognizing the traditional systems of jurisprudence in the protection of rights in TK and the question of achieving international validity for these rights was raised. The setting up of administrative structures at the community level was seen as having the potential to harness the customary systems of protecting their knowledge.

Access to genetic resources and benefit-sharing mechanisms

The Caribbean region is rich in biological diversity and genetic resources and there is a keen interest to use these resources for their benefit while employing conservation mechanisms to ensure its sustainability. All the countries visited are parties to the Convention on Biological Diversity, 1992 ("the CBD"). In compliance with Article 6(a) of the convention, the three countries have developed National Biodiversity Strategy and Action Plans with steering committees and advisory boards charged with the preparation of guidelines on the management of biodiversity. These committees are driven by government institutions usually in the Department of Environment. In Guyana, draft regulations to guide access to and the use of genetic resources have been prepared.

Article 15.1 of the CBD recognizes the sovereign rights of states over their natural resources and grants national governments the authority to make this the subject of national law. Article 15.2 goes on to urge States to create conditions to facilitate access to genetic resources for environmentally sound uses and not to impose restrictions that run counter to the objectives of the Convention. Views on the regulation of access to genetic resources were mixed. On the one hand, there were those who advocated the regulation of such access by developing guidelines and legislation. On the other, there are those who feel that to regulate such access could be counter-productive and suppress development given the relative lack of research capacity and capability in the region. This faction also felt that the value of TK could be diminished as those who have the capacity to develop it if restricted could suppress development of a particular resource. It seemed that the critical success factor was for there to be an adequate balance struck between ensuring the community is recognized as the owner of the resource and an opportunity for cooperation with those who could exploit the resource for mutual benefit and the general advancement of mankind.

The findings support the first argument (regulation of access) as government efforts in the region are geared towards the development of regulations and guidelines for access to genetic resources to prevent the erosion of these resources and ensure sustainable use in achieving the goals of the CBD.

Several questions were raised on the protection of plant genetic resources and plant varieties and this is evidence of the close relationship between the protection of TK and associated natural and genetic resources. Questions were related to the ownership of rights when selections and crosses or hybrids have been done in two different countries, and the calculation and payment of royalties in this scenario.

The focus of the steering committees seemed to be directed more at the management of biodiversity, including the development of policies and institutions to manage biodiversity rather than to protection.[30] Some of these committees were of the view that IP legislation is inadequate for the protection of these rights and have developed administrative regulations to guide access to biodiversity supported by guidelines on "biopiracy" which still have to be tested.

Feedback received from one of the countries implementing the guidelines was to the effect that they were not really effective as people still had access to the resources and there was no adequate mechanism to monitor or enforce compliance with them[31]. WIPO's assistance was repeatedly sought with the development of these guidelines and possible legislation, but to be used in conjunction with community practices.

The need to cooperate with countries in other regions who have started drafting and implementing regulations and legislation in this area was highlighted. The trade implications for the countries were raised as an area where much more work was required as the academic and research communities (veritable sources and users of TK) were described as not being particularly trade oriented. It was suggested that access should lead to transfer of technology and funds for community development.[32] Several questions were raised in regard to access such as: who has the right within a community to grant access? If a community as a whole decides to restrict access and an individual within the community provides it, what should happen? These were questions which they hoped to find answers to through cooperating with other countries and discussing these issues further.

IP NEEDS AND EXPECTATIONS #10
Provision of legal advice on the IP aspects of access to genetic resources and benefit sharing and technical assistance with drafting of access regulations.

IP NEEDS AND EXPECTATIONS #11
Provision of technical advice on plant breeders' rights (PBR's).

Calls for a share in any benefits arising from the use of TK or genetic resources were made. It was mostly suggested that the benefits should be used to develop the source community. However, the issue of benefit sharing where resources or knowledge is found across borders was frequently raised as a problem. The possibility of forming a chain of indigenous communities across the region as a basis for benefit sharing was mentioned although the complexities of working out a mechanism for compensation were recognized.

The approach in one of the communities was that the knowledge should be shared freely with no costs attached if it would be to the benefit of mankind; but where only the companies stand to benefit (or benefit disproportionately in terms of huge profits), then the source communities and holders of TK should share in those profits.[33]

Research companies were urged to focus on transfer of technology as one of the ways of benefiting the communities. An international rights management system was proposed although it was not clear how this was expected to work and an analogy was drawn with the international system for the collective management of musical rights.[34] It was suggested that holders of TK form an association in each country to enable them to deal directly with the IP office and other institutions to determine how best to manage their rights. The need to set up administrative structures within communities to guide access, use of the resources and to monitor benefit sharing was emphasized.

Recognition of the need to preserve the source of medicinal knowledge to ensure sustainability was identified by the traditional healers.[35] Examples of biopiracy were cited which has led to people being suspicious and secretive.[36]

The people of the **Maroon Community** in, **Accompong, Jamaica**[37] had memories of a group of researchers from abroad who spent time in their community documenting their life style and practices. The researchers reportedly subsequently published a book for sale with no rewards to the community. This community indicated that they felt honored to have been approached by the researchers as they got little attention or recognition in the country normally. They were willing to cooperate with them and confirmed that they would probably do so again faced with the same situation. This reinforces the point made earlier about the lack of self esteem in some of the communities reported to have its roots in historical socio-political problems where they now seek external validation of their value, even if this could amount to exploitation. The statement about the lack of recognition in the country belies a more complex set of issues, mostly political. From all the contacts made in the country including at senior government levels, Maroon heritage is widely recognized.

Examples were also cited of the exploitation of natural resources for commercial benefits by foreign companies using them as base products.[38] An example was given of the patenting of chemicals extracted from a plant found in a country in the region reportedly by overseas research foundation(s) and on two patents pending on fish poisons also developed on the basis of information obtained from a local community on the basis of research funded by an overseas institution.[39]

IP Needs and Expectations #12.
Provision of IP information and advice on best practice protocols

IP Needs and Expectations #13
Training on the drafting of contracts

Some examples were provided on measures used to control access to resources. In **Guyana**, the **Amerindian Research Unit, University of Guyana, Georgetown,** enters into Memoranda of Understanding (MOU's) embodying signed agreements with researchers seeking to work with local communities and indigenous peoples as to what can be taken out of the communities and the uses to which they can be put. These agreements were however described as "loosely defined".[40] Examples were also cited of *"...many American drug companies coming in to ask questions of local communities on the use of herbs and to collect plant samples."*[41]

The information gathered supports the view that the communities tend to cooperate with these researchers as they have no incentives to withhold the information and have to weigh the benefits of cooperating with the companies against the perils to their own personal situations which are for the most part economically untenable.

An example was given of successful research conducted by the subsidiary of a Swiss company who conducted molecular sampling of odor in Guyana which has led to the creation of a scent.[42] Another example in the same country was the use of photographs of items in the National Art Gallery in one of the US Art magazines by an art restorer who had been contracted to work on some of the art works.

WIPO was requested to provide technical assistance in the area of the IP implications of access to genetic resources to developing countries with weak scientific and research capabilities and attendant weak legal systems to exploit the potential reservoir of plant genetic resources in their countries.

THE IWOKRAMA INTERNATIONAL CENTER FOR RAIN FOREST CONSERVATION AND DEVELOPMENT

A project that encompasses many of the issues raised in this section and the section on documentation above is the Iwokrama International Center for Rain Forest Conservation and Development. Iwokrama is an autonomous international conservation, research and development organization formed by agreement between the Government of Guyana and the Commonwealth Secretariat.

The organization is responsible for the management, conservation and sustainable development of about 360,000 hectares (nearly a million acres), of pristine tropical forest, which Guyana has dedicated to the international community to be used to demonstrate how tropical forests can provide economic benefit while conserving biodiversity.

The Mission of Iwokrama is *"to promote the conservation and sustainable and equitable use of tropical rain forests in a manner that will lead to lasting ecological, economic and social benefits to the people of Guyana and to the world in general, by undertaking research, training and the development and dissemination of technologies"*.[43]

Iwokrama is making a special effort to learn and document the TK and management practices of the forest goods and services by the Amerindian communities who traditionally use the Iwokrama forest[44] without compromising the traditional resource access and use rights of Amerindian Peoples living in or near the forest. This project is probably one of the few examples offering an opportunity to take a practical look at issues such as access regulations, Material Transfer Agreements (MTAs) and benefit-sharing arrangements as well as the IP aspects of documentation and protection of TK in general.

Source: Meeting with Mr. David Cassells, Director General, Iwokrama International Center for Rainforest Conservation and Development, Georgetown, Guyana, June 4, 1999, and from the Iwokrama website at <http://www.idrc.ca/iwokrama>.

Best practice protocols

In fulfillment of its commitment to ensuring an equitable distribution of the benefits accruing from the conservation and management of the forest and its broader research and capacity building programs, Iwokrama (see text box "The Iwokrama International Center for Rain Forest Conservation and Development" above) is commissioning a consultancy study on developing best practice protocols to govern the protection of intellectual property rights and benefit sharing across all aspects of its mandate. The aim is to synthesize best practice lessons learned from around the world in order to develop locally relevant protocols.[45] The need to balance the purpose of the protocols and their benefits was emphasized because if they are too stringent, they would exclude the business community and if too loose, will run the risk of losing national patrimony. The protocols were seen to also have potential for providing business partners a basis for developing that relationship.[46]

Contract

The use of contract law was discussed as a possible tool in the protection of TK for example, protection against the indiscriminate use of information in written form i.e. already codified or documented[47]. Examples of contracts suggested included the use of Material Transfer Agreements (MTAs), and licensing agreements.

TK Protection in Other Policy Areas

Two pulling forces were identified: on the one hand, homogenization, integration and globalization of culture and on the other, the need to maintain unique cultures. The social and economic realities of holders of TK such as the healers and the members of local communities were cited as an important element to take into account given the impact of this on their bargaining power. Members of indigenous communities highlighted the derogatory nature in which they were now viewed and the effect on the young generation who want little or nothing to do with the traditional practices and have to live with the pressure of straddling two life styles and be accepted in both.[48] Communities were said to have lost respect for their own culture.[49]

Land rights issues were also raised as critical to enabling the indigenous communities live in the traditional lifestyle they were used to and to preserve the culture of their peoples.[50] Poverty was identified as a key problem as it reduces the bargaining power in many communities rich in TK and associated resources which leads the people to give out information for far less than its value.

The land, marginalization and poverty issues identified by the indigenous communities were common to all the countries and the visits to the **Maroon community in Accompong, Jamaica** and the **Caribe Community in Arima, Trinidad and Tobago** gave the delegation direct access to this information. In **Guyana,** (where the constitution of the country recognizes the rights of the **Amerindian People**[51] who are a distinct indigenous community with a dedicated Ministry), these questions were of critical importance. The need to raise awareness and educate these communities on the implications of agreements which they enter into with international companies (not restricted to IP alone) was identified by the Honorable Minister of Amerindian Affairs. This is because ownership of rights was not limited to just the land but the resources found on it and the Amerindian community was reported to have the freedom to use their land as they wish. The lack of information on the alternatives available to them to protect their TK and the resultant rights was seen as a major problem.

These issues were raised in each country and in most discussion groups particularly with the holders of TK and the local communities. Most of the issues are, strictly speaking, not IP issues and cannot be addressed by applying the IP system but are considered to be important to the overall well being of the people. The WIPO delegation made the point however that they could only distil the IP issues with a view to developing adequate responses to them.

Management and Enforcement of Rights and Interests in TK

Calls for local institutional strengthening to protect TK were made. These included the development of multi-sectoral national institutions (including the legal, environmental, trade and economic sectors) to take a coherent and coordinated approach to the protection of the national interests of their people.

The importance of providing basic information to the holders of TK on their rights was identified. As one of the informants stated "*...[T]he indigenous peoples and TK holders in the community for the most part have no information as to the rights they have or what recourse to the law they have*".[52] Many of the issues this subject raises were considered to be new to developing countries and as such should be discussed further through sensitization and awareness raising programs. Training of nationals in the identification of potentially useful resources and development of a basic understanding of the IP system, drafting of appropriate legislation, drafting of contractual agreements and understanding of application of these laws in a regional framework was requested.

IP NEEDS AND EXPECTATIONS #14
Awareness raising on the use of the IP system to protect TK

IP NEEDS AND EXPECTATIONS #15
Training on enforcement of IP

A need that was clearly identified was for this process to start at a national level moving towards a regional approach particularly as in the Caribbean where the knowledge systems, resources and practices exist across borders.

Underlying all of this was the cautionary note that was sounded on the dangers of not involving the communities in any effort to decide how their traditions should be managed.

The lack of adequate IP enforcement mechanisms has already been identified earlier in this chapter and the point was made that developing countries were under pressure from developed countries to implement laws which they cannot sustain as they had inadequate enforcement infrastructure.

It was suggested that a cost/benefit analysis of the cost of protection against the benefits of protection be carried out to ascertain if indeed it was worthwhile implementing these laws. As one government official put it *"...what is the benefit of the IP system [...which is supported by the technological might of all major companies] to countries with weak science and technology capacity?"* To further buttress the point, information was provided to the effect that the researchers in one section of a multi-national pharmaceutical company were more than those in the whole of the Caribbean.[53]

General

Some governments expressed an interest in advancing discussions on the protection of TK *vis-à-vis* the agricultural, pharmaceutical and cosmetic industries with a view to achieving sustainable development and economic growth.[54]

All government ministers encountered showed a keen interest in developing a progressive approach to these issues in the interest of their people. In some of the countries IP is recognized at the governmental level as a tool for development, the regulation of which can attract investment. One government has taken the approach of attracting private sector investment in this area and is seeking to encourage more research in the universities.[55] A positive attitude is taken towards IP but there is the need to modernize and develop legislation in some cases.

IP NEEDS AND EXPECTATIONS #16

Facilitating cross-sectional dialogue at the national, regional and international levels

The nationalist responsibility of Governments is justified by the IP elements of TK protection but it was pointed out that the huge political reality of power had to be recognized in developing an articulated and realistic response to these issues in developing countries. The view was that there was a tendency for a nationalist approach to move towards closing access to TK or controlling it. The reality, it was suggested, was that many small island economies like exist in the Caribbean could not afford to do so.

One issue which was identified as a critical factor was the need for the policy makers and political directorate to recognize the importance of TK and to give it higher priority in the crucial area of budgetary allocations for research and development. Governments were also requested to take a cross-sectoral approach to addressing this issue as it crosses functions including environment, health, food, trade and investment, and law and justice. It was suggested that governments should play a role in advising its citizens who exercise certain rights over resources on the implications of agreements which they enter into. Governments were also requested to exercise its civil responsibility by ensuring that traditional practices which are bad for the community and the environment are discouraged and called upon to develop a combination of structures taking a holistic approach which will assist with addressing these diverse and multifaceted issues. Finally, they were requested to call for the harmonization of international agreements such as TRIPS/CBD/and the International Convention for the Protection of New Varieties of Plants, 1991 ("the UPOV Convention"). The importance of taking a regional approach to addressing these issues was reiterated at the meeting[56] the delegation had at the CARICOM secretariat. The secretariat has a pivotal role in facilitating a regional approach, if this is decided, and this was recognized and acknowledged and the commitment to these issues by the secretariat was reiterated.

SUMMARY OF INTELLECTUAL PROPERTY NEEDS AND EXPECTATIONS

1. A commonly agreed definition of TK
2. Identification of IP aspects of TK
3. Development of modalities for cooperation between TK
4. holders, owners and users to establish IP benefits
5. Assistance with documentation
6. Provision of advice on IP protection of documented TK
7. Provision of legal advice on the IP aspects of access to [illegible] [illegible] of access regulations
8. Provision of technical advice on the IP aspects of plant breeders rights
9. Assistance with the modernization and strengthening of IP legislation
10. Practical testing of the utility of the IP system in the protection of TK
11. Provision of IP advice on draft sui generis laws
12. Studies on the IP aspects of customary law and the development of IP [illegible]
13. Provision of IP information and advice on the protocols
14. Training on the drafting of contracts
15. Awareness raising on the use of the IP system to protect TK
16. Training on enforcement of IP
17. Facilitating cross sectional dialogue at the national, regional and international levels

BEST COPY AVAILABLE

Notes

---

[1] Meeting with lawyers and TK interest groups in Port of Spain, Trinidad and Tobago, June 2, 1999. Present at the meeting were: Mr. Everard Byer, Member, World Board of Directors, International Federation of Organic Agricultural Movements (IFOAM); Ms. Olive Ramchand, Fitzwilliam, Stone, Furness-Smith and Morgan, Attorneys; Ms. Debra D'Ade, J.D. Sellier and Co., Attorneys; Ms. Irani Ramoutar, Attorney; Mr. Chaitram Bhola, Customs and Excise Division; Ms. Rayan Ramsundar, National Institute of Higher Education, Research, Science and Technology (NIHERST); Mr. Anthony Vieira, Mair and Co. Attorneys; Ms. Alison Demas, Attorney; Ms. Sharon Le Gall, Attorney; Mr. Vasneist Kokaram, M.G. Daly and Partners, Attorneys; Mr. John Cupid, National Carnival Commission; Ms. Patricia Simon, Alexander, Jeremie and Co., Attorneys; Mr. Inshan Hosein, Legal Officer, Ministry of Legal Affairs; Ms. Lorraine John, Legal Officer, Ministry of Legal Affairs; Ms. Kimberley Erriah, Ashmead Ali and Co., Attorneys; and, Ms. Pearl Springer, Director, National Heritage Library.

[1] Meeting with lawyers from the Attorney General's Department, the Office of the Chief Parliamentary Counsel, the Ministry of Foreign Affairs and Foreign Trade, the Jamaican Bar Association and some private law firms, Kingston, Jamaica, June 7, 1999.

[2] See also S.B. Le Gall, "Preserving One's Narrative: Implications of IP Protection of Folklore and the Steel Pan in Trinidad and Tobago", Master of Law Thesis, York University, Canada, 1994, p. 155.

[3] The subject matter of TK was seen to include religion in Trinidad and Tobago particularly with the convergence of different faiths which were said to form the belief system of the country. Take particular note of the visit to Siparia, north east of Moruga, on May 31, 1999, where the delegation met with Sister Colomba Byrne, Father Stephen Doyle and Ms. Theresa Noel at the La Divina Pastora parish and discussed the merging of spiritual, traditional and religious belief (Christianity and Islam)

[4] "Patois" , a derivative of French Creole, which at a time was widely spoken is "....now dying out with the old...". Meeting with the Moruga Community under the chairmanship of Mr Godfrey Lee-Sing, Local Government Representative for the electoral district of Moruga, Moruga community members, comprising persons of African, Indian, Chinese, Latin American and other descent, Moruga, Trinidad and Tobago, May 31, 1999.

[5] Meeting with traditional healers and other interested parties, Port of Spain, June 2, 1999. The persons present were: Pundit Surujdeo Maharaj, a Hindu healer; Mr. Cristo Adonis, Shaman of the Caribe Community; Ms. Rayan Ramsundar, NIHERST; Mr. Mervyn Williams, Creative Arts Center, University of the West Indies; Dr. Kuma Mahabir, Ministry of Legal Affairs; Mr. Lester Chadband, a traditional healer; Mr. Mazini Salim; Mr. Razack Lhageer; Ms. Lorraine John, Legal Officer, Ministry of Legal Affairs; Mr. Inshan Hosein, Legal Officer, Ministry of Legal Affairs; Mr. Antoine Dellevi, Military Museum; Ms. Dorine St. Hill and Ms. Valerie Laurent Stephens, Diabetes Association of Trinidad and Tobago; Ms. Cheryl Lans, Center for Gender and Development Studies, University of the West Indies; Ms. Nerle Robertson, Caribbean Network for Integrated Rural Development (CNIRD); and, Ms. Karen Mohammed, Chemistry, Food and Drugs Division, Ministry of Health, Port of Spain, June 2, 1999.

[6] Meeting with Ms. Gail Teixera, the Honorable Minister of Culture, Youth and Sports, Georgetown, Guyana, June 3, 1999

[7] Meeting with representatives of the Institute of Jamaica (IOJ), Kingston, June 7, 1999. Present at this meeting were Dr. Elaine Fisher, Executive Director of the IOJ, Mr. Michael Cooke, Director Museums Division; Mr. Bernard Jankee, Director, African Caribbean Institute of Jamaica/Jamaica Memory Bank; Dr. David Boxer, Chief Curator, National Gallery of Jamaica; Mr. John Aarons, Director, National Library; Ms. Elizabeth Morrison, Zoologist, Natural History Division; Ms. Dalrene Richards, Supervisor, Junior Center; Ms. Joyce Campbell and Ms. Claudette Thomas of the Jamaica Cultural Development Commission; Mr. Sydney Bartley, Director, Division of Culture; and Ms. Tracey Ann Lawrence, Executive Assistant.

[8] Meeting with Dr. Arnoldo Ventura, Special Adviser to the Prime Minister on Science and Technology, Kingston, Jamaica, June 7, 1999

[9] Meeting with the Moruga Community, Moruga, Trinidad and Tobago, May 31, 1999.

[10] Meeting with the steering committee of the Environmental Protection Agency (EPA) of Guyana attended by Ms. Denise Fraser, Operations Director, EPA; Mr. Ramesh Lilwah, Weed Scientist, National Agriculture Research Unit; Mr. Macsood Hoossein, Biodiversity Planner, EPA; Ms. Vimla Roopchand, Environmental Officer (Biodiversity), EPA; Dr. Leslie Munroe, Plant Protection Specialist, National Agriculture Research Unit; and Mr. John Caesar, Dean, Faculty of Natural Sciences, UG. Steering committee (EPA), Georgetown, Guyana, June 4, 1999.

[11] Meeting with Ms. Gail Teixera, the Honorable Minister of Culture, Youth and Sports, Georgetown, Guyana, June 3, 1999.

[12] Meeting with the Maroon Community, Accompong, Jamaica, June 8, 1999.

[13] Meeting with the Maroon Community, Accompong, Jamaica, June 8, 1999.

[14] The National Herbarium is in the Department of Life Sciences, University of the West Indies, St. Augustine Campus, St. Augustines, Trinidad and Tobago.

[15] Information provided by Ms. Yasmin Barsh-Comeau, Curator of the National Herbarium at a meeting with Biodiversity interest groups, Port of Spain, June 1, 1999.

[16] Information provided by Ms. Pearl Eintou Springer, Director, National Heritage Library, Trinidad and Tobago at a meeting with Attorneys, representatives of Research Institutions and Government Agencies in Port of Spain, Trinidad and Tobago, June 1, 1999.

[17] Information provided by Mr. Sterling Belgore of the Rose Foundation at a meeting with the Moruga Community , Moruga, Trinidad and Tobago, May 31, 1999.

[18] The Caribbean Community has three objectives: (a) economic cooperation through the Caribbean Single Market and Economy (b) coordination of foreign policy among the independent Member States: and (c) common services and cooperation in functional matters such as health, education and culture, communications and industrial relations. The member states of CARICOM are: Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago. The associate members are Anguilla, The British Virgin Islands, and the Turks and Caicos Islands. For more information please see the CARICOM website at <www.caricom.org>.

[19] Meeting with Non Governmental Organizations, Inter Governmental Organizations and representatives of Government Ministries, Port of Spain, Trinidad and Tobago, June 2, 1999. Present at this meeting were Mr. George Gamerdingen, International Labor Organization (ILO); Messrs. Mervin Williams and Rawle Gibbons, the Festival Center for the Creative Arts, University of the West Indies; Ms. Rayan Ramsundar, NIHERST; Mr. Alvin Seereeram, Director of Planning, Land and Marine Resources, Ministry of Agriculture,; Ms. Cynthia Ross, President of the National Parang Association; Ms. Arlene Thomas, Adviser to the National Parang Association; Mr. Bruce Wilson, Economic/Commercial Officer, Embassy of the United States of America; Ms. Lorraine John, Legal Officer, Ministry of Legal Affairs; Mr. Inshan Hosein, Legal Officer, Ministry of Legal Affairs; Ms. Fay Durrant, Director, and Mr. Zully Ramirez-Ganbaa, Legal Advisor, Association of Caribbean States; Mr. Antoine Dellevi, Military Museum; and, Mr. Lester Efebo Wilkinson, Substantive Permanent Secretary, Ministry of Legal Affairs, presently on sabbatical leave at the University of the West Indies.

[20] Meeting with biodiversity interest group, Kingston, June 9, 1999. Present were: Ms. Cordia Thompson, Biodiversity Planning Assistant; Dr. Audia Barnett, National Commission on Science and Technology; Ms. Yvette Strong, Natural Resources Conservation Authority (NRCA); Ms. Donna Black, Ministry of Environment and Housing; Ms. Una May Gordon, Team Leader, National Biodiversity Strategy Action Plan, NRCA; Ms. Andrea Donaldson, NRCA; Ms. Marcia Creary, NRCA; Ms. Carol Stephens, NRCA; Mr. Andrew Woods, Scientific Research Council; and Dr. Elaine Fisher, Executive Director, Institute of Jamaica.

[21] Meeting with the Dr. Elaine Fisher, Executive Director Institute of Jamaica, June 7, 1999.

[22] Meeting with lawyers from the Attorney General's Department, the Office of the Chief Parliamentary Counsel, the Ministry of Foreign Affairs and Foreign Trade, the Jamaican Bar Association and some private law firms, Kingston, Jamaica, June 7, 1999.

[23] Jamaica

[24] Inter-Agency Roundtable, Georgetown, Guyana, June 3, 1999. Present were Ambassador Donald Abraams, Ministry of Foreign Affairs, Ms. Patricia Hopkinson-Carter, Department of Law, University of Guyana (UG); Mr. John Caesar, Dean, Faculty of Natural Sciences, UG; Ms. Juliet Sattaur, Assistant Registrar of Deeds, Law Courts; Ms. Carolyn Paul, Deputy Registrar of Deeds, Law

Courts; Mr. Charles Fung-A-Fat, Deputy Chief Parliamentary Counsel, Ministry of Foreign Affairs; Mr. Neville Totaram, Coordinator, National Advisory Committee on External Negotiations, Ministry of Foreign Affairs; Mr. Randolph Williams, Technical Adviser (Projects), Ministry of Culture, Youth and Sports; Ms. Jennifer Wishart, Anthropological Officer, Walter Roth Museum of Anthropology; Ms. Janette Forte, Researcher, Amerindian Research Unit, UG; Mr. Gobind Rameshwar, Technical Adviser, Amazon Cooperation Treaty, Ministry of Foreign Affairs; Mr. Bhupal Uditram, Head of Department and Special Assistant to the Minister of Amerindian Affairs; Ms. Elizabeth Cox, Agricultural Program Officer, Ministry of Agriculture; Ms. Mildred Lowe, Cultural Officer, Ministry of Culture, Youth and Sports; Ms. Carmen Jarvis, Secretary General, National Commission for the United Nations Educational, Scientific and Cultural Organization (UNESCO); Mr. Forbes July, Foreign Services Officer, Ministry of Foreign Affairs; Mr. Lloyd Searwar, Director, Foreign Service Institute, Ministry of Foreign Affairs and Mr. Keith George, Ministry of Foreign Affairs.

[25] Particularly in discussions with the Honorable Minister of Legal Affairs, Ms. Kamla Persad-Bissessar during the celebration of " Indian Arrival Day", Port of Spain, May 30, and at the meeting with the group of Attorneys, Representatives of Research Institutions, and Government Agencies such as the National Heritage Library, Trinidad and Tobago, June 1, 1999.

[26] Indian Arrival Day commemorates the arrival in Trinidad and Tobago in 1845 of indentured laborers from India.

[27] The Working Group on intellectual property protection was set up by Mr. Clement J. Rohee, Honorable Senior Minister of Foreign Affairs and it operates under the auspices of this ministry, coordinated by Mr. Keith George, Foreign Service Officer II.

[28] Meeting with group of Attorneys, Representatives of Research Institutions, and Government Agencies such as the National Heritage Library, Trinidad and Tobago, June 1, 1999.

[29] Meeting with biodiversity interest groups, Port of Spain, June 1, 1999. Present at this meeting were: Dr. Antonio Pinchinat, Regional Specialist, Inter-American Institute for Cooperation on Agriculture (IICA); Dr. Ralph Phelps, Plant Consultant Pathologist, Agricultural Society of Trinidad and Tobago; Dr. Musa Mohamed, Caroni Research Station; Dr. P. Umaharan, Lecturer in Life Sciences, University of the West Indies; Mr. Inshan Hosein, Legal Officer, Ministry of Legal Affairs; Ms. Lorraine John, Legal Officer, Ministry of Legal Affairs; Dr. Judith Gobin, Environmental Consultant; Ms. Robyn Cross, Team Leader, National Biodiversity Strategy and Action Plan, Environmental Management Agency; Mr. Lester Efebo Wilkinson, Substantive Permanent Secretary, Ministry of Legal Affairs, presently on sabbatical at the University of the West Indies; Mr. Andrew Bain, environmentalist and lignoculture technologist; Ms. Rayan Ramsundar, NIHERST; and, Ms. Yasmin Barsh-Comeau, National Herbarium, Department of Life Sciences, University of the West Indies.

[30] Guyana

[31] Meeting with group of Attorneys, Representatives of Research Institutions, and Government Agencies such as the National Heritage Library, Trinidad and Tobago, June 1, 1999

[32] Meeting with the Maroon Community, Accompong, Jamaica, June 8, 1999.

[33] Meeting with lawyers and TK interest groups in Port of Spain, Trinidad and Tobago, June 2, 1999.

[34] Meeting with traditional healers and other interested parties, Port of Spain, June 2, 1999.

[35] Meeting with Mr. Christo Adonis, a shaman from the Caribe Community, Arima, Trinidad and Tobago, June 1, 1999.

[36] Please note that there are three established Maroon communities in Jamaica: Accompong in the parish of St. Elizabeth; Moore Town in the parish of Portland and Scott's Hall in the parish of St. Mary.

[37] Inter-Agency Roundtable, Georgetown, Guyana, June 3, 1999.

[38] Information provided by Ms. Janette Forte, Researcher, Amerindian Research Unit, University of Guyana, Georgetown at the Inter-Agency Roundtable, Georgetown, Guyana, June 3, 1999.

[39] Meeting with Mr. Al Creighton, Amerindian Research Unit, University of Guyana, Georgetown on June 4, 1999.

[40] Meeting with representatives of the Institute of Jamaica (IOJ), Kingston, June 7, 1999.

[41] Information provided by Ms. Gail Teixera, the Honorable Minister of Culture, Youth and Sports, Georgetown, Guyana, June 3, 1999. See article in the Economist of September 5, 1998 "The sweet smell of success."

[42] Extrapolated from the Iwokrama website: http://www.idrc.ca/iwokrama.

[43] Please refer to the Iwokrama project business plan.

[44] Please see the concept note developed by Iwokrama for the study on best practice protocols for IP and Benefit sharing.

[45] Meeting with Mr. David Cassells, Director General, Iwokrama International Center for Rainforest Conservation and Development, Georgetown, Guyana, June 4, 1999.

[46] Meeting with group of Attorneys, Representatives of Research Institutions, and Government Agencies such as the National Heritage Library, Port of Spain, Trinidad and Tobago, June 1, 1999.

[47] Meeting with Mr. Christo Adonis, a shaman from the Caribe community, Arima, Trinidad and Tobago, June 1, 1999.

[48] Meeting with Ms. Desrey Fox, Anthropologist, sociologist and linguist and a member of the Amerindian Community, Georgetown, Guyana, June 4, 1999

[49] Meeting with Mr. Christo Adonis, a shaman from the Caribe Community, Arima, Trinidad and Tobago, June 1, 1999. port of Spain, June 1, 1999 and meeting with Mr. Francis Vibert de Souza, the Honorable Minister of Amerindian Affairs, Georgetown, Guyana, June 4, 1999

[50] Article 169 of the constitution of the Republic of Guyana.

[51] Meeting with the Moruga Community, Moruga, Trinidad and Tobago, May 31, 1999; meeting with the Maroon Community, Accompong, Jamaica, June 8, 1999 and meeting with Ms. Desrey Fox, Anthropologist, sociologist and linguist and a member of the Amerindian Community, Georgetown, Guyana, June 4, 1999

[52] Meeting with Dr. Arnoldo Ventura, Special Adviser to the Prime Minister on Science and Technology, Kingston, Jamaica, June 7, 1999.

[53] Meeting with Ms. Gail Teixera, the Honorable Minister of Culture, Youth and Sports, Georgetown, Guyana, June 3, 1999.

[54] Jamaica.

[55] Meeting with Ms. Jacqulyn Joseph, Director, Human Development, and Ms. Carol Laws, Cultural Officer, of CARICOM in Georgetown, Guyana, June 3, 1999.

Part III

Summary, Reflections and Conclusions

Nature, Scope and Objectives of the Fact-finding Missions: "Intellectual Property Needs and Expectations"

What is "Traditional Knowledge"?
  Use of appropriate terminology
  Nature of traditional knowledge

Value and Importance of Protecting Traditional Knowledge
  Why protect TK?
  Problems confronting TK holders

Nature of IP and its Role in TK Protection
  Per se excluded subject matter
  TK that may not qualify for IP protection
  Adjustment of expectations

No Protection for TK
  Arguments against any form of TK protection
  Rejection of IP protection for TK

Use of IP to Protect TK
  Use of IP: Legal questions
  Use of IP: Operational questions

Documentation of TK

Access to and Benefit-sharing in Genetic and Biological Resources

Contract

Protection of "Expressions of Folklore"

Economic Valuation of TK

Conclusions

Postscript
  WIPO's activities under the 2000-01 Program and Budget
  Developments at WIPO subsequent to the publication of the Draft Report
  Comments on the Draft Report relating to future WIPO activities

Nature, Scope and Objectives of the Fact-finding Missions: "Intellectual Property Needs and Expectations"

The fact-finding missions (FFMs) were mandated by WIPO's Member States as part of WIPO's program of activities for the 1998-1999 biennium. The missions were one element of several new WIPO activities designed to *"identify and explore the intellectual property needs and expectations of new beneficiaries, including the holders of indigenous knowledge and innovations, in order to promote the contribution of the intellectual property system to their social, cultural and economic development"*.[1] The missions formed part of a *"study of current approaches to, and future possibilities for, the protection of intellectual property rights of holders of indigenous knowledge, innovations and culture. . ."*.[2]

It follows that this Report on the FFMs reports specifically on the intellectual property (IP) dimensions of the needs and expectations of holders of traditional knowledge (TK). This Report is limited to an identification of those needs and expectations to which the IP system is or may be able to respond. This does not diminish or obscure the other needs, expectations and concerns of traditional knowledge holders, be they indigenous peoples, or local and other communities and individuals. WIPO's representatives were provided during the FFMs with information on needs, expectations and concerns in political, economic, and social domains. WIPO respects them and believes they should be addressed in the appropriate forums. However, if WIPO's activities regarding TK are to remain tightly tied to WIPO's overall IP mandate, as they must, an IP focus is necessary.

This approach may be criticized as compartmentalist or reductionist. It may also be seen by some as too closely identified with the existing IP system, or too narrowly angled towards urging indigenous peoples and local communities to adapt to the IP system rather than being open to the adaptability of the IP system.[3] In their comment on the Draft Report, the Future Harvest Centres supported by the Consultative Group on International Agricultural Research (CGIAR) stated as follows:

> *"The term 'IP needs' as used in the report seems presumptive . . . The question in fact is: are there needs (societal, environmental and cultural) that can effectively addressed through an IP-type mechanism? IP is a set of tools, a means by which we attempt to achieve certain objectives. Methodologically, it seems wisest that fact-finding begin with no presumptions about the types of tools that will be useful to achieve community objectives, but go and get information from the communities and individuals and from there determine whether or not IP-type tools are helpful in that context. Nevertheless, the report does indicate the types of objectives that would likely fall outside a formal or sui generis IP system. This is quite useful."*

WIPO recognized these potential pitfalls, and thus sought to consult diversely and widely within governmental, indigenous, local community, industry, academic and other non-governmental circles. This is evidenced by the broad range of interlocutors consulted on the FFMs, and during the other traditional knowledge-related activities carried out by WIPO during 1998 and 1999. (The names and affiliations of the persons consulted on the FFMs are contained in the Interim Mission Reports attached as an annex to the Report.) Although the mandate of WIPO relates to IP, the FFMs formed part of a larger study on "current approaches to and future possibilities for"[4] the protection of the intellectual property rights, a broad concept, of TK holders. WIPO staff conducting the FFMs were careful not to view the FFMs exclusively through an IP lens. This was one of the reasons a semi-structured approach to data collection was employed (see Methodology chapter, above).

Another comment on the Draft Report[5] discussed the normative guidelines according to which the FFMs were conducted, particularly WIPO's reference to "intellectual property needs and expectations", and the goal of promoting "social, economic and cultural development."

199

The authors of this comment suggested the following normative framework:

> *". . . (T)he creation of an appropriate system for the protection of traditional knowledge should be guided by the goal of empowering traditionally subordinated groups. Since traditional knowledge is rooted in the groups that have developed such knowledge over time, it is necessary to protect the peoples who are the source of the knowledge. Preservation of the people entails granting and protecting fundamental economic and non-economic rights held by the people. While acknowledging that intellectual property law and human rights are distinct, we also recognize that they should be guided by the same principle: protection of groups that have been typically subordinated and on whose existence the development of intellectual property depends. Indeed, WIPO itself has acknowledged the growing interdependence of intellectual property with human rights norms, in its panel discussion to commemorate the 50th Anniversary of the Universal Declaration of Human Rights (November 9, 1998)."*

The commentators proceeded to assess four models for TK protection in the light of their proposed normative framework, namely the public domain model, the commercial use model, the trust model and the ownership model.

As mentioned, the FFMs were only part of a range of TK-related activities carried out by WIPO in 1998 and 1999. Although this Report focuses on information compiled from the missions, WIPO's other TK activities influenced and informed the analysis of this information. Similarly, WIPO staff read widely in the course of their work. The literature and materials consulted by them enriched their fact-finding and informed subsequent reflection on the results of the missions. Thus, some of the literature is referred to in the Report. For a selected bibliography of the literature and other materials consulted by WIPO, see the "Bibliography".

Consistent with the "intellectual property needs and expectations" approach of the FFMs, each of the sections on the individual FFMs in the chapter on "Identifying the Intellectual Property Needs and Expectations of TK Holders: Results of the Nine Fact-finding Missions" extracts the IP needs and expectations of those consulted. They are placed in text boxes to make them as visible as possible. Each section ends with a summary of the needs and expectations identified during the relevant mission. This chapter, in turn, summarizes, reflects upon and draws broad conclusions on what may be considered to be the main and most prevalent IP needs and expectations expressed by TK holders in all the regions visited during the FFMs.

What is "Traditional Knowledge"?

Use of appropriate terminology

An initial difficulty in this area is the use of appropriate terminology. It became evident on all the FFMs that parties consulted ascribe various meanings to the notions "traditional knowledge", "traditional knowledge, innovations and culture ", and "traditional knowledge, innovations and practices", the terms used by WIPO for purposes of the FFMs.

WIPO's past work in this area began in 1978 and was initially limited to so-called "expressions of folklore". In cooperation with the United Nations Educational, Scientific and Cultural Organization (UNESCO), three meetings of experts convened by WIPO led to the adoption in 1982 of the "Model Provisions for National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions" ("the Model Provisions"). Section 2 of the Model Provisions defines the term "expressions of folklore" as "productions consisting of characteristic elements of the traditional *artistic* heritage developed and maintained by a community or by individuals reflecting the traditional artistic expectations of such a community" (emphasis added). However, since adoption of the Model Provisions in 1982, international legal instruments in other fields have increasingly used terms such as "traditional knowledge, innovations and practices" (Article 8(j), Convention on Biological Diversity, 1992) or "indigenous knowledge, cultures and traditional practices" (Preamble, Draft

UN Declaration on the Rights of Indigenous Peoples), which refer generally to a broader range of subject matter (for example, traditional agricultural, biodiversity-related and medicinal knowledge) than that which is covered by the term "expressions of folklore" in the Model Provisions.

For many informants on the FFMs, the relationship between "traditional knowledge" and "folklore" was unclear. Discussions were also held on the distinction between "indigenous" and "traditional" knowledge, and some informants use other terms such as "indigenous technologies" and/or "traditional technologies".

Lack of terminological clarity can confuse and obscure what is already, terminology aside, a complex enquiry. The FFMs demonstrated the need for terminological clarity. An appropriate term or terms describing the subject matter for which protection is sought should be selected. As importantly, from an IP perspective, a clear definition or description of what is meant (and not meant) for IP purposes by the term or terms selected is desirable (see **Box 1**). As noted by the Future Harvest Centres supported by the CGIAR in their comment on the Draft Report, the meaning ascribed to TK (or whichever term is selected) will vary according to, first, whether or not the term would be used in a *sui generis* context, and, second, whether that would be "*sui generis*" in the sense of new forms of IP rights over new subject matter, or an entirely separate body of rights embedded in the cultural knowledge systems of traditional communities (i.e., a non-IP system). The Future Harvest Centres stated that the term *sui generis* is often used by traditional communities in the latter sense.[6]

BOX 1. IP NEEDS AND EXPECTATIONS

- The selection of an appropriate term or terms to describe the subject matter for which protection is sought
- A clear definition or description of what is meant (and not meant) for IP purposes by the term or terms selected

However, the context in which traditional knowledge is generated and preserved is important to its meaning. Therefore, any definition of traditional knowledge must reflect the internal cultural cognitive categories of the particular community and must necessarily be developed on a case-by-case basis. It would be incorrect to assume that all indigenous communities are homogenous. Only the most general definitions can be formulated.[7] In addition, WIPO acknowledges the right of indigenous groups, local communities and other TK holders to decide what constitutes their own knowledge, innovation, cultures and practices, and the ways in which they should be defined.

This Report's use of various terms, including "traditional knowledge" and "expressions of folklore", is explained in the chapter on "Terminology" above.

The nature of traditional knowledge

After the FFMs and other related activities, we are able to make some preliminary observations on the nature of traditional knowledge of particular relevance to an IP perspective:

- Traditional knowledge is not limited to any specific field of technology or the arts. Traditional knowledge systems in the fields of medicine and healing, biodiversity conservation, the environment and food and agriculture are well known. Other key components of traditional knowledge are the music, dance, and "*artisanat*" (i.e. designs, textiles, plastic arts, crafts, etc.) of a people. Although there are creations which may be done purely to satisfy the aesthetic will of the artisan, many such creations are symbolic of a deeper order or belief system. When a traditional singer performs a song, the cadence, melody, and form all follow rules maintained for generations. Thus, a song's performance entertains and educates the current audience, but also unites the current population with the past.

- Understanding the interplay between practical knowledge, social history, art, and spiritual or religious beliefs provides a valuable foundation for developing an understanding of the people who hold this knowledge. While modern arts and sciences often place individual accomplishment over community development, traditional knowledge systems celebrate the community's cooperative effort.
- Intertwined within practical solutions, traditional knowledge often transmits the history, beliefs, aesthetics, ethics, and traditions of a particular people. For example, plants used for medicinal purposes also often have symbolic value for the community. Many sculptures, paintings, and crafts are created according to strict rituals and traditions because of their profound symbolic and/or religious meaning.
- Traditional knowledge is a multifaceted concept that encompasses several components. Traditional knowledge is, generally, produced in accordance with the individual or collective creators' responses to and interaction with their cultural environment. This may apply to all forms of knowledge, however, whether "traditional" or "modern". In addition, traditional knowledge, as representative of cultural values, is generally held collectively. This results from the fact that what can sometimes be perceived as an isolated piece of literature (a poem, for example) or an isolated invention (the use of a plant resource to heal wounds, for instance) is actually an element that integrates a vast and mostly coherent complex of beliefs and knowledge, control of which may not vest in the hands of individuals who use isolated pieces of knowledge, but be vested in the community or collective. Furthermore, most traditional knowledge is transmitted orally from generation to generation, and thus remains largely undocumented.
- A fundamentally important aspect of traditional knowledge is that it is "traditional" only to the extent that its creation and use are part of the cultural traditions of communities. "Traditional", therefore, does not necessarily mean that the knowledge is ancient or static. "Traditional" knowledge is being created every day, it is evolving as a response of individuals and communities to the challenges posed by their social environment:

> *"Traditional knowledge is not merely learned by rote and handed down from one generation to the next. Inherently dynamic, it is subject to a continuous process of verification, adaptation and creation, altering its form and content in response to changing environmental and social circumstances."*[8]

Several comments on the Draft Report underlined or offered additional perspectives on these points – for example, the General Directorate of Industrial Development, Ministry of Trade and Industrial Development, Gabon, stated that the acquisition of TK is strictly personal and cannot be removed from or separated from the individual custodian, because he or she is the "vessel" of the TK.[9]

Thus, in its use, traditional knowledge is also contemporary knowledge. It is, therefore, not only desirable to develop a system that documents and preserves traditional knowledge created in the past and which may be on the brink of disappearance: it is also important to envisage a system that contributes to the promotion and dissemination of innovations which are based on continuing use of tradition. One is therefore not talking only about freezing and preserving knowledge that exists now, but also about preserving what exists as an indispensable and powerful tool for fostering continued traditional innovation and creativity. In their comment on the Draft Report, the Future Harvest Centres supported by the CGIAR made a similar point in respect of the way in which "traditional knowledge" is conceived:

> *". . . the context of the report's definition should be the generation and conservation of TK, and not in its preservation. Not only will this avoid the static (although somewhat romantic) connotation of TK; it will highlight the dynamic utility of TK, practices and innovation."*[10]

More generally, WIPO learned from the FFMs that TK is a rich and diverse source of creativity and innovation. The FFMs revealed that traditional knowledge systems are frameworks for continuing creativity and innovation in most fields of technology, ranging from traditional medicinal and agricultural practices to music, design, and the graphic and plastic arts. Stakeholders consulted during the FFMs consider TK to be a constantly renewed source of wealth, both as an economic asset and as cultural patrimony. This was the case in both developing and developed countries visited during the FFMs.

The FFMs also provided opportunities to learn about the initiatives of various countries and regional organizations to protect TK. Several of these initiatives include special laws or model laws on the protection of indigenous peoples generally, including their TK. Examples are contained in the sections in this Report on each of the FFMs.

WIPO learned from the FFMs that the IP issues related to TK cut across the conventional branches of IP law, such as copyright and industrial property. In many cases, TK holders do not separate "artistic" from "useful" aspects of their intellectual creations and innovations; rather, both emanate from a single belief system which is expressed in daily life and ritual. (In fact, the "artistic" and "useful" dichotomy is not as stark in the IP system as some would allege. See below under "The artistic/useful dichotomy"). The FFMs also revealed that numerous indigenous and local communities have protocols for the protection of TK and TK-based innovations under customary law. (See further under "Customary laws and protocols" below.)

In its comment on the Draft Report, the United States Patent and Trademark Office (the USPTO) stated that the Draft Report showed *"that there are vast differences among indigenous communities across valleys, let alone across continents, in the types of folklore and TK developed over generations. As well, there are diverse interests in ownership/exclusion on the one hand versus openness to all on the other hand, the local rules concerning rights to use/own TK, and the differing desires to commercialize versus maintaining secrecy of such knowledge."*[11] The FFMs conducted by WIPO certainly bear out these points. The USPTO comment proceeds to draw the conclusion that it may not be possible or desirable to establish a comprehensive, uniform set of rules at the international level to govern the use of TK and folklore. This comment is referred to again below.

The Future Harvest Centres supported by the CGIAR, in their comment on the Draft Report, noted that while the Report correctly assumes not all indigenous communities are homogenous, it does not point out that communities within themselves are not homogenous. Referring, by way of example, to differences among groups within agrarian societies concerning access to and control over productive resources such as land and germplasm, the Future Harvest Centres stated:

> *"In this context, the notion and operationalization of collective ownership, access and benefit sharing of TK, practices and innovation could become very problematic . . . Agrarian differentiation cannot be ignored as this has consequences for both formal and informal IP regimes. Women in particular would be particularly unjustly treated if TK is only recognized and rewarded on communal or individual domains. For example, in many situations, women are responsible for community germplasm conservation and development, particularly for minor crops and crops grown for household food security. However, often these women do not have adequate representation at community level, where decision making is often the men's domain. As is generally the case, when economic values are attributed to women's crops, the men then enter and dominate the sphere of women's crops. In the recommendation, it might therefore be worthwhile to add that further study needs to be conducted regarding the relation of agrarian differentiation to access and control of TK practices and innovations. In the study of informal IP regimes, there should be more analysis on how various groups of TK holders are identified and represented."*[12]

Value and Importance of Protecting Traditional Knowledge

Why protect TK?

TK systems are increasingly accepted as an important source of useful information in the achievement of sustainable development. Studies of local communities provide evidence that the protection of TK can provide significant environmental benefits as well as possible commercial applications. Much of the world's crop diversity is in the custody of farmers who follow age-old farming and land use practices that can conserve biodiversity and provide other local benefits, such as diet diversity, income generation, production stability, minimization of risk, reduced insect and disease incidence, efficient use of labor, intensification of production with limited resources and maximization of returns with low levels of technology.[13] TK is also an important source of income, food and health for large parts of populations, particularly in developing countries.[14] In addition, as population pressures force indigenous communities to adopt unsustainable practices, such as over-fishing or clearing forests on watersheds, incentives and mechanisms to protect biological resources and associated TK can be crucial in preserving threatened species.[15]

The protection of traditional knowledge is also important for social and cultural reasons. This is so particularly perhaps in developing and least developed countries, but as the Government of Canada pointed out in its comment on the Draft Report, "the protection and preservation of TK is also an important issue in industrialized countries".[16] TK can play a role in the economic and social organization of countries, and recognizing the value of such knowledge may be a viable means of promoting a sense of national cohesion and identity. TK holders also stress the importance of TK validation and protection for individual and community dignity and respect. In its comment on the Draft Report, the USPTO provided information on legislative and other measures concerning the preservation, conservation and protection of TK and folklore in the United States of America.[17]

On another level, developed, developing and least developed countries are engaged in implementing two international agreements - the Convention on Biological Diversity, 1992 (CBD) and the Agreement on Trade-Related Aspects of Intellectual Property Rights, 1994 (the TRIPS Agreement) - that may affect the manner in which knowledge associated with the use of genetic resources (whether "traditional" or not) is protected and disseminated. As an outcome of the Uruguay Round negotiations, many developing and least developed countries have accepted the obligation under the TRIPS Agreement to establish high standards of IP protection as a means of promoting free trade. It has been argued that biodiversity, and the traditional knowledge associated with using it in a sustainable manner, are a comparative advantage of those countries that are biodiversity-rich, enabling them to participate more effectively in global markets and thus rise above current levels of poverty and deprivation. Thus, protection of traditional knowledge at the national and the international levels may contribute to advancing the integration of developing and least developed countries into the global economy in ways that will benefit those countries.

In its comment on the Draft Report, the National Institute for the Defense of Competition and Intellectual Property Protection of Peru (INDECOPI), pointed out the importance of identifying the objectives for protecting TK as it may be easier to design appropriate forms of protection once the objectives are determined.[18] As the sections on each of the FFMs have shown, persons spoken with on the FFMs articulated many differing objectives.

Problems confronting TK holders

The FFMs showed that holders of traditional knowledge are faced with a variety of difficulties. Not all of them are addressable by IP, however:

- A serious problem is the reluctance of the younger generation to learn the "old ways." The rejection of traditions by the young and the encroachment of modern lifestyles often result in the decline of traditional knowledge and practices, as well as language loss. Either through acculturation or diffusion, many traditional practices are lost. Thus, a primary need expressed by many TK holders is to *document and preserve* the knowledge that is held by elders and communities throughout the world. The absence of willing heirs to this knowledge has resulted in the precarious situation where the death of a TK holder can result in the demise of an entire tradition and knowledge system. (See further under "Documentation of TK" below.)
- Another difficulty facing holders of traditional knowledge is the lack of *respect* and appreciation for such knowledge. The true understanding of the value of TK is often overlooked within the modern reductionist approach to science. Unless information is developed under aseptic clinical conditions by scientific methods,

it is sometimes viewed as "inferior." This is a corollary to the "nih" syndrome in evidence in some corporate research and development departments to reject ideas or inventions that are "not invented here". For example, when a traditional healer provides a mixture of herbs to cure a malady, the healer may not describe the effects on the body as molecular interactions in the terms of modern biochemistry, but the healer bases his "prescription" upon generations of "clinical" trials undertaken by healers before him.

- At times, modern society has displayed a prejudice against TK since it does not conform to accepted methods of learning. Some of the vernacular references to TK carry negative connotations e.g., denigrating traditional medicine as "primitive" and its practitioners as "quacks", or even "witch doctors".
- Yet another problem confronting holders of traditional knowledge is the commercial exploitation of their knowledge by others, which raises the question of *legal protection* of TK. Cases involving artistic designs (such as the "Morning Star Pole" in Australia) and natural products (such as oil from the neem tree in large parts of Asia, Africa and Latin America) all bear evidence to the value of traditional knowledge in the modern global economy. Unfortunately, many of the commercial interactions between traditional communities and private corporations can result in agreements from which legal uncertainty and consequent imperfection or loss of rights arises for both parties. A lack of experience with existing formal systems, economic dependency, lack of a unified voice, and, in many cases, a lack of clear national policy concerning the utilization of traditional knowledge, results in traditional communities being placed at a decided disadvantage. On the other hand, the lack of clear rules protecting traditional knowledge creates risks for business interests, which prefer closing deals under well-established, reliable and enforceable rules.

As mentioned above, not all of these problems are addressable within IP terms. The need to be clear on the nature of IP laws and policies (i.e., what they are intended to and can achieve) and of their role in TK protection was evident, and is the subject of the next section.

Nature of IP and Its Role in TK Protection

The FFMs illuminated the need to manage expectations among TK holders and others regarding the role of IP in TK protection. WIPO's new activities in this field may have created unrealistic expectations. In its comment on the Draft Report, the Government of Canada agreed with this assessment, and stated: *"Much of TK lies outside the scope of IP. A further question concerns whether WIPO will conduct a follow-up with the TK holders and communities interviewed, after the Report is finalized."*[19] WIPO also concurs with this comment from the Future Harvest Centres supported by the CGIAR:

> *"It will be important therefore that WIPO continue to educate policymakers and communities about the use of IP as a tool for protecting TK, noting there are many other tools available which may be more appropriate in reaching the objectives of indigenous and local communities. If this report increases understanding of the role IP may (or may not) play within national and/or community objectives then it will have done a big service to decision-makers and those influencing them. The report certainly makes a step in this direction by indicating it is addressing one piece in a larger puzzle."*[20]

The IP system's contribution to the protection of TK is of necessity limited to TK that is or may become protectable IP subject matter. In this regard, one can distinguish between knowledge systems and formations that are *per se* and regardless of their "traditionality" or otherwise, not subject matter protectable under IP, on the one hand, and traditional knowledge systems and formations which are "intellectual properties" but which may not meet the standards for IP protection, on the other.

Per se *excluded subject matter*

It is clear that certain forms of what some FFM informants consider to be "traditional knowledge" fall outside the scope of potential IP subject matter. In the section on the "Introduction to Intellectual Property" earlier on in this Report it was explained that "intellectual property" refers to property rights in creations of the

205

mind, such as inventions, industrial designs, literary and artistic works, symbols, and names and images. The notion is a broad one, and is not limited to the existing categories of IP. Thus, "intellectual property" can include productions and matter not covered by the existing branches of IP, provided, however, that they result "from intellectual activity in the industrial, scientific, literary or artistic fields." [21]

It follows that certain forms of what some consider to be "traditional knowledge" cannot be protectable under IP, including spiritual beliefs as such[22], dispute-settlement processes and methods of governance, languages, human remains, and biological and genetic resources in their natural state. These are not protectable IP subject matter, whether "traditional" or not. Nor is knowledge or information *per se* generally protectable under IP, unless it is in the form of a "trade secret". It does not, however, follow that such forms of TK may not, directly or indirectly, become subject to IPRs – for example, TK, which would otherwise not fall within the scope of the notion "intellectual property", may form the basis of an invention qualifying for patent protection.[23] The effect of such a patent on the original TK, and the rights of the traditional holders to continue using the TK, is another matter.

TK that may not qualify for IP protection

While many forms of TK are or could be protected as IP, existing IP mechanisms are not able to fully protect all forms of TK. This is because existing IP mechanisms cannot fully respond to the characteristics of certain forms of traditional knowledge, namely, their holistic nature, collective origination and oral transmission and preservation. However, current and future possibilities for TK protection by IP require further testing and exploration. (See further under "Use of IP to Protect TK" below.)

Adjustment of expectations

There is thus a need to provide TK holders and others with clear information on the role and nature of IP protection and those aspects of TK that are potential subject matter for IP protection so that any unrealistic expectations may be adjusted. See **Box 2.**

BOX 2. IP NEEDS AND EXPECTATIONS

The adjustment of expectations through effective awareness raising as to the role and nature of IP protection in relation to TK

No Protection for TK

Arguments against any form of TK protection

A few parties consulted on the FFMs opposed any form of protection or regulation of TK, whether by IP or any other system. This view was based upon the notion that traditional knowledge is by its nature in the public domain, that it should not be the subject of exclusive rights or "commodified", and that attempts to regulate its use and transmission would have far-reaching philosophical and practical implications for the public domain and the creation, management and free flow of information. Critics point also to the difficulties inherent in attempting to police and enforce new controls on cultural property and TK.[24]

Rejection of IP protection for TK

Some informants consulted were sceptical of or opposed the use of the IP system to protect TK. Such views are relatively well represented in academic, non-governmental and other literature, including certain indigenous peoples' statements and declarations.[25] These views may be summarized briefly as follows: the IP system, as a product of the European industrial and intellectual tradition, fails indigenous people and other TK holders at various levels. In the **operational** context, the cost of filing and registration of IPRs is prohibitive, as are the costs of enforcement and infringement proceedings. There are also clear **conceptual** problems: *"IPR law provides indigenous peoples with few legal courses of action to assert ownership of knowledge because the law simply cannot accommodate complex non-Western systems of ownership, tenure and access."*[26] It is argued that the IP system negatively excludes TK because of its trans-generational and communal nature.[27] Apart from these immediate operational and conceptual problems, FFM informants also pointed to more subtle dysfunctions. The IP system is seen by some as a modern reincarnation of European colonialism. Informants referred to what they described as deep-running divergences between "Western" and "indigenous" knowledge systems, particularly as to their respective conceptions of the origins, management and ownership of information and knowledge. Several informants believe that the notions of "property rights" and "ownership" are foreign to indigenous and local communities. Claims were also made that indigenous and local communities are being subjected to exploitative and increasing "biopiracy" by private sector companies from particularly the pharmaceutical, seed and agrochemical industries. ("Biopiracy" usually denotes the unauthorized extraction and utilization of TK and/or associated biological and genetic resources and/or the acquisition of IPRs over resultant inventions that derive from such knowledge or resources without provision for benefit-sharing with the individuals or community that provided the knowledge or resources.[28]) Examples were cited of patents granted over modified genetic resources and TK-based innovations that, according to the informants, push at the boundaries of "novelty" and "inventiveness". Indeed, several such patents have been withdrawn after challenges that the patents had been granted over properties well known in systems of TK of indigenous and local communities, such as the turmeric and Ayahuasca cases.[29] These cases illustrate the difficulty that patent examination offices in industrialized countries have in recognizing prior art that has been created and held by traditional knowledge systems.[30] Thus, the **negative** exclusionary effect of the IP system is compounded by a **positive** exclusionary effect, where IP rights are acquired by non-TK holders to the exclusion of their pre-existing rights.[31] Certain of these views expressed by informants were contextualized within broader criticisms of the intellectual property system as serving only the interests of industrialized countries, and not those of developing countries.

In short, such informants believe that the IP system is inherently inappropriate and dysfunctional in relation to the needs and expectations of TK holders. They argue for a non-IP "*sui generis*" system, or systems of "community", "collective" or "indigenous" rights.

To counteract the positive exclusionary effect of the acquisition of IPRs over TK by non-TK holders, particularly patents, they expressed needs for:

- the documentation and wide publication of TK, where desired by the relevant TK holders, so as to destroy novelty for patent purposes, thus rendering the TK non-patentable by TK holders and non-TK holders alike; and
- an analysis of the methods used by patent examination offices for gaining access to and reviewing prior art.[32]

See **Box 3**.

Box 3. IP NEEDS AND EXPECTATIONS

- A *sui generis* system of "community" or "collective" rights to protect TK
- To prevent the unauthorized acquisition of IPRs (particularly in the case of patents) over TK by documenting and publishing TK as searchable prior art, where so desired by the relevant TK holders
- An analysis of how prior art is established for purposes of patent examinations in the context of TK

BEST COPY AVAILABLE

One comment on the Draft Report, by an indigenous peoples' organization, provided an interesting nuance to criticisms that the IP system facilitates the commodification of TK by taking TK out of its context and using it in untraditional ways. While endorsing such criticisms, the comment also added: *"The draft report could focus on the fact that such commodification and taking out of context does not per se work to the detriment of the rights of traditional knowledge holders, but, under appropriate conditions to be further investigated and defined, can in fact work to their benefit."*[33]

Comments

Certain of these criticisms may be justified. There are indeed TK systems and formations that the IP system cannot accommodate. However, numerous persons consulted stated that one should not exaggerate the case against IPRs. There are a growing number of instances where individuals and communities are testing and using the existing patent, trademark, design or copyright systems to protect their knowledge and culture with some success (see further under "Use of IP to Protect TK" below). Some of the criticism leveled at the IP system appears generalized and not founded upon a strong technical knowledge of IP law and practice and of the specifics of concrete uses of TK.[34] Imprecise use of technical language and IP concepts also obfuscates the issues, rendering balanced and factual assessments of the true role of IP in specific cases more difficult to make.[35]

It is helpful, too, to draw careful distinctions between the IP system and how it is meant to work, on the one hand, and particular cases in which the system may have failed, on the other. Cases in which patents should not have been granted, for instance, are examples of bad patents, not necessarily a bad patent system.

The growing importance attached to TK, coupled with concerns over the loss of cultural and biological diversity, has generated a maze of complex and rapidly-evolving public policy, ethical and legal questions in a multiplicity of national, regional and international fora. These questions manifest themselves in *inter alia* human rights, cultural, trade, food and agriculture, indigenous peoples' rights, labor standards, sustainable development, land and environment/biological diversity forums. Characteristic of this scenario is its decentralized and disintegrated nature. Related issues appear and are dealt with in diverse yet overlapping fora, in which the issues are subjected to differing policy considerations, moral stances and analytical tools. Yet, amid increasing conflicts over rights and responsibilities over traditional knowledge resources, decision-makers are required to develop coherent and integrated policy responses.

It is incumbent upon the IP community to contribute technical IP expertise and perspectives to debates on these issues, particularly those taking place in non-IP forums. Discussions and interviews conducted on the FFMs highlighted the need for greater awareness-raising on the IP system, particularly among sectors of society and communities unfamiliar with it, such as indigenous and local communities and governmental offices not directly involved in IP law and administration. Greater awareness-raising may assist to dispel certain misconceptions concerning IP and result in more technical, finely-calibrated and nuanced assessments of the TK/IP nexus. There is a need for strengthened dialogue and contact between TK holders, the private sector, governments, NGOs and other stakeholders to assist in developing modalities for cooperation between them, at community, national, regional and international levels. See **Box 4.** As important, is the need for the IP community to better understand and appreciate the perspectives, expectations and needs of TK holders. See **Box 5.**

Box 4. IP NEEDS AND EXPECTATIONS

- Facilitation of dialogue and contact between TK holders, the private sector, governments, NGOs and other stakeholders to assist in development of modalities for cooperation between them, at community, national, regional and international levels

BEST COPY AVAILABLE

BOX 5. IP NEEDS AND EXPECTATIONS

- Greater awareness raising on the IP system, particularly among sectors of society and communities unfamiliar with it, such as indigenous and local communities and governmental offices not directly involved in IP law and administration
- Greater understanding by the IP community of the perspectives, expectations and needs of TK holders

Enhanced participation by the national and regional IP offices and the IP community at large in TK-related processes in which IP issues are raised (such as those concerned with biological diversity, the environment, food and agriculture, and the rights of indigenous peoples) is also desirable. See **Box 6**. See also under "Access to and Benefit-sharing in Genetic and Biological Resources" below.

BOX 6. IP NEEDS AND EXPECTATIONS

- Enhanced participation by the national and regional IP offices and the IP community at large in TK-related processes in which IP issues are raised

One comment on the Draft Report differed sharply from this conclusion. Stating that the "IP community at large" seems to refer to "trans-national corporations possessing a pre-existing global patent ownership portfolio", the comment denied they have any role in TK-related processes as they are "the antagonists to holders of traditional knowledge."[36] By way of a reply to this comment, it may be said that the FFMs showed a more subtle picture, in which many IP rightsholders and users, including many private sector companies, are willing and interested to learn more about the perspectives of TK holders, and, where appropriate, to contribute IP information to processes that would otherwise have little or no IP input. By the same token, many officials consulted who are involved in TK-related processes expressed a need for increased technical information on the relevant IP aspects of their work.

It is not intended to attempt to respond to all of the views expressed. However, we wish to respond to what appear to be a few commonly held misconceptions:

"TK is collective/IP is individual"

It is widely stated that IPRs are unsuitable for TK protection because they protect new knowledge that is created by individuals and do not recognize collective rights. However, the FFMs and other literature indicate that the reality is more complicated than these generalizations suggest. Not all TK is collective. As Gupta and others point out, while it is true that many indigenous and local community cultures generate and transmit knowledge from generation to generation collectively, in some cases individuals can distinguish themselves and are recognized as informal creators or inventors separate from the community.[37] Similarly, not all IPRs are individualistic. Increasingly, invention and creation take place in firms where groups of persons may be cited as co-inventors or co-authors, concepts recognized by the IP system. Trademark law recognizes "collective marks" and geographical indications also protect the interests of a collective. Additionally, although collective management does not mean collective authorship and ownership, the collective management of IPRs is very familiar to the music industry, where copyright in musical works has successfully been collectively managed for many years.

BEST COPY AVAILABLE

Several comments on the Draft Report touched upon this issue of the "collectivity" of TK. For example, the Future Harvest Centres supported by the CGIAR noted in their comment on the Draft Report that, as communities within themselves are not homogenous, *"the notion and operationalization of collective ownership, access and benefit sharing of TK, practices and innovation could become very problematic."*[38] Another comment observed that some TK is held by specialist groups within communities, leading to questions concerning the meaning of "community":

> *"The spiritual healers or diviners are well known examples of this. Not only do they hold specialist knowledge but they are often the holders of group knowledge which has long been abandoned by the larger society. [. . .] my own research has demonstrated the resiliency of such knowledge where I have discovered complex medicinal practices that were recorded in respect of the Zulus [in South Africa] over 100 years ago which concur exactly with how certain plants are used in the present day. This emphasises how the specialist group protects and transmits its knowledge effectively over a period which has witnessed profound religious, socio-economic and political change within the broader community. Rather the issue may rest not on the protection of IK itself, but on recognition and support of this specialist group that generates it."*[39]

Generally speaking, the collectivity of creation and ownership of TK poses challenges for the IP system and the testing of options for the collective acquisition, management and enforcement of IPRs by TK holders' associations is desirable. Further study could include the possible applicability of collective management of IPRs to TK.[40] See **Box 7**.

BOX 7. IP NEEDS AND EXPECTATIONS

- Study of relationship between collectivity of TK and IPRs, more particularly testing of options for the collective acquisition, management and enforcement of IPRs by TK holders' associations, including the applicability of collective management of IPRs to TK

Customary laws and protocols

Several informants believe that concepts such as "ownership" and "property rights" are foreign to indigenous and traditional communities, and inappropriate for delineating rights and duties with respect to TK. However, FFM findings and anthropological literature reveal that such concepts – or at least close equivalents to them – also exist in most if not all traditional societies.[41] According to the Canadian indigenous peoples' organization, the Four Directions Council:

> *"Indigenous peoples possess their own locally-specific systems of jurisprudence with respect to the classification of different types of knowledge, proper procedures for acquiring and sharing knowledge, and the rights and responsibilities which attach to possessing knowledge, all of which are embedded uniquely in each culture and its languages."*[42]

Traditional proprietary systems are referred to in many indigenous statements and declarations, such as the Mataatua Declaration on Cultural and Intellectual Property Rights of Indigenous Peoples, 1992, and the Julayinbul Statement on Indigenous Intellectual Property Rights, 1993. The need for the recognition of customary law systems is also included in ILO Convention 169[43], the Draft United Nations Declaration on the Rights of Indigenous Peoples, 1994[44] and the Principles and Guidelines for the Protection of the Heritage of Indigenous People[45], elaborated by the Special Rapporteur of the United Nations Sub-Commission on Prevention of Discrimination and Protection of Minorities.[46]

It may, therefore, not be correct to suppose that patents, copyrights, trade secrets and trademarks are entirely alien or incompatible concepts to all indigenous and traditional rural communities.[47] Proprietary systems do exist in many traditional societies, but, equally, any assumption that there is a generic form of collective/community IPRs ignores the intricacies and sheer diversity of indigenous and traditional proprietary systems.[48]

As Dutfield points out, to deny that indigenous and local communities recognize the concepts of "ownership" and "property rights" weakens the positions of those who argue for the protection of TK. If TK is not even considered by the holders themselves to be anybody's property, then it may reasonably be assumed that TK is part of the public domain and that nobody's rights are being infringed by publishing or commercially exploiting it. These advocates of TK protection are then compelled to resort to moral arguments that TK should enjoy a privileged legal status *vis-ä-vis* other public domain "non-traditional" knowledge. Separate IP rules for traditional and non-traditional knowledge would be difficult to sustain. Referring to suggestions that indigenous populations should be accommodated by collapsing the idea/expression distinction or by abandoning the time horizons on copyrighted material, Brown writes: *"Expectations that such radical extensions of intellectual property laws could be restricted to indigenous populations through the establishment of regimes of special rights are extremely naïve."*[49] It is more than naiveté, however, since international treaties dealing with IP typically include a national treatment obligation. Thus, any specialized regime for the protection of TK would have to extend beyond local indigenous populations to all foreign nationals with which the country in question has treaty relations.

In fact, traditional societies often have highly-developed, complex and effective customary systems for TK protection. These systems have, until now, existed in virtual independence of the formal IP system. The point, therefore, is not that TK holders do not recognize intellectual property concepts, but rather that the formal IP system is a *type* of intellectual property system with which they are not familiar.[50]

Many informants recognized the need for members of traditional communities and of the formal IP community to learn about each other's systems, and that the interfaces, similarities and differences between customary and modern legal systems require understanding and management. Several informants advocated protection of TK by the application of customary intellectual property law on its own terms.[51] The FFMs demonstrated a clear need to study the relationship between customary protection of TK and the IP system, and particularly the implications of customary laws and protocols for IP. See **Box 8**.

BOX 8. IP NEEDS AND EXPECTATIONS

- Study of customary laws and protocols in local and traditional communities, including conclusions relevant for the formal IP system

In their comment on the Draft Report, the Future Harvest Centres supported by the CGIAR, stressed the importance of this need. The Future Harvest Centres underscored the desirability for national governments to understand the informal systems in their own right, and how the national system may operate and interface with it.[52] In addition, as already noted earlier in this chapter, they suggested that, as communities within themselves are not homogenous, *"In the study of informal IP regimes, there should be more analysis on how various groups of TK holders are identified and represented."*[53]

WIPO would also agree with a comment made on the Draft Report by several persons that one should not draw too close an analogy between social and cultural systems of protecting TK and the statutory forms of IP protection.

Taking the example of a traditional healer in a village in Karnataka, India, whose knowledge of curing a particular ailment was known only by himself, his daughter and his son-in-law, the comment stated:

> *"It may seem that functionally the village healer in Karnataka is like a patent monopolist in the sense that he has exclusive control over the knowledge. But even if the village healer is technically a monopolist in one sense, it does not follow that he exploits the monopoly position in the same way as a pharmaceutical company would. The analogy rests on a narrow notion of the ability of intellectual property law to exclude use, but does not take into account the many ways in which a right to exclusivity may be exercised. The village healer may exploit his position to extract resources from his fellow villagers, or he may share the knowledge openly out of a sense of altruism or to gain prestige and status. Recognizing the existence of an exclusive right does not determine how the right will be exercised."*[54]

The "artistic/useful" dichotomy

As pointed out above, it is often stated that the IP system distinguishes clearly between "artistic" and "useful" articles, and can thus not accommodate creations and innovations that are both artistic and useful, such as many tradition-based innovations and creations. However, the artistic/useful dichotomy is not as stark in the IP system as some would allege. For example, industrial design law protects the original ornamental and non-functional features of an industrial article or product. The design of an article or product which is dictated solely by its function is thus not protectable as a design. However, increasingly, under certain theories of design, form follows function, so that in some cases a design's form cannot be easily distinguished from its function. Similarly, copyright protection can be obtained for articles that might also qualify for industrial designs protection, such as items of applied art. Copyright is intended to protect aesthetic creations, but in the case of applied art and other useful artistic works, such as works of architecture, for example, the artistic/useful distinction is less clear.

Transaction costs

One of the criticisms against the IP system encountered during the FFMs is the cost of acquisition, maintenance and enforcement of IPRs. Such transaction costs, it is argued, bar access to the IP system to potential users without the necessary financial resources. However, costs associated with use of the IP system do not make the system inherently unjust, particularly if ways can be found to lower costs or to assist indigent persons and communities to use the system if they wish. Moreover, this presupposes that the more expensive rights to establish through registration schemes (such as patents and trademarks) will be preferred over rights that do not depend upon registration (such as copyright and protection against unfair competition).

The scope of patents

It is often argued that patents derived from knowledge acquired from traditional communities prevent members of these communities from continuing to use their knowledge. It is important to understand that a patent covers only the specific invention described and nothing more. Hence, for example, a patent on an invention derived from or based upon TK does not prevent the continued use of the TK by the relevant community. In addition, in a number of countries, the "prior use" exception allows people already engaged in exploiting an invention to continue doing so after the invention becomes subject to a patent held by another party. Similarly, it is argued that industrial patent holders merely "tinkered" with a natural substance or traditional practice making only minor changes. Once again, a patent only covers the invention described. As Downes observes, if the invention is indeed minor and not worth very much, then the patent covers only a minor invention and is not worth very much. If the invention is a major advance, the patent is more valuable.[55] On the other hand, as one of the comments on the Draft Report pointed out, even patents for inventions that hardly advance the state of the art can still be remunerative and have "nuisance value" for and affect the activities of other inventors.[56]

Once again, greater awareness-raising on the IP system, particularly among sectors of society and communities unfamiliar with the IP system, such as indigenous and local communities and Governmental offices not directly involved in IP law and administration, may assist to dispel misconceptions on the IP system and result in more technical, nuanced and finely-calibrated assessments of the role of IP in TK protection (see **Box 4** above).

Use of IP to Protect TK

Despite criticism of IP laws and principles and a rejection of their usefulness in the TK domain by certain informants, many others expressed interest in exploring further the actual and potential role of the IP system in TK protection. There are many examples of TK that are or could be protected by the existing IP system. In addition, while many informants believe that the present IP system does not adequately recognize TK holders' rights, they are interested in undertaking further work on how the IP laws and system can be modified to curb those aspects of IP laws and systems "which allow piracy or are seen to condone it."[57] Several informants also suggested certain modifications to IP law to improve its functionality in TK protection, and, others, new IP tools. Thus, "use of IP" includes use of existing IP tools, as well as of modified IP tools or IP-like tools. This cluster of views may be described as **"legal questions"**.

Concerns were also expressed that TK holders have or would have difficulty in availing themselves of the benefits of the IP system, as well as IP-like rights, because of the costs associated with the acquisition, maintenance and enforcement of IPRs (at least those, as far as acquisition costs are concerned, that depend upon registration.) It was added that indigenous peoples, local and rural communities and other TK holders are also hindered by having, generally, little knowledge of or practical experience with the formal IP system. These views may be termed **"operational questions"**.

Use of IP: legal questions

Many informants expressed the view that, in the shorter term at least, attention be focussed on the extent to which existing IP tools protect TK. Testing the present categories of IP would involve working directly with TK holders, including indigenous peoples and local communities, to raise awareness of the basics of the IP system, undertake a practical and technical examination of the application of the IP system to various forms of TK and provide training on the IP system. Consideration should not, at this stage at least, be given to modifying existing IP rights or creating new, *sui generis* IP rights, several persons felt. .

The FFMs showed clear needs for greater awareness-raising on the IP system among TK holders (see **Box 4** above), testing the applicability and use of existing IP tools for TK protection and for the provision of technical information and training to TK holders and government officials alike on possible options under the IP system for TK protection (see **Box 9**). Several comments on the Draft Report supported these findings.[58] For example, in its comment on the Draft Report, the Kenya Intellectual Property Office (KIPO) stated that most TK holders and local communities have very little awareness of the formal IP system, and emphasized that "WIPO should take an initiative to spearhead the creation of awareness of IPR and its implications on TK, innovations and practices."[59]

Similarly, many Government officials indicated interest in developing legislative and other tools to protect TK, and expressed the need for IP advice and assistance in this regard (see **Box 9**). (See also under "Access to and Benefit-sharing in Genetic Resources" below.)

BOX 9. IP NEEDS AND EXPECTATIONS

In the shorter term:

- Testing the applicability and use of existing IP tools for TK protection, through practical and technical community-level pilot projects and case studies
- Provision of technical information and training to TK holders and government officials on possible options under the existing IP categories for TK protection
- Provision of IP information, assistance and legal advice to Governmental authorities in respect of regional, sub-regional and national legislative and other initiatives to protect TK

Informants are interested in exploring greater use of almost all the existing branches of the IP system, particularly trademarks, geographical indications, patents, industrial designs, copyright, and unfair competition, including trade secrets. Informants on the FFMs referred to certain specific IP tools, concepts or options being tested, used or studied by TK holders, as well as proposals for modifications to existing IP tools. For example:

Trademarks

- The registration of collective and certification trade marks to establish a sign under which goods emanating from a particular group or collective, or manufactured in accordance with particular methods or standards, can be sold[60];
- The prevention of the unauthorized registration of traditional names, symbols and insignia as "culturally offensive" and, therefore, as being contrary to public order or morality under trademarks legislation.

Geographical indications

- The registration of geographical indications, as contemplated internationally in the Lisbon Agreement for the Protection of Appellations of Origin and their International Registration, 1979 and the Protection under the Madrid Agreement for the Repression of False and Deceptive Indications of Source, 1891.

Patents

- Inclusion in patent applications, which claim TK and biological resources-based inventions, of evidence that the TK and/or biological material has been obtained with the prior informed consent (PIC) of the country of origin, and acknowledgment of all relevant public domain and community based knowledge. In its comment on the Draft Report, the Kenya Intellectual Property Office (KIPO) proposed that where the genetic resources and TK form the basis of an application for IPR, the applicant should provide adequate information on the source of the material, including information relating to a material transfer agreement (MTA) which should include benefit-sharing provisions. Where possible copies of such agreements should accompany the application[61];
- A grace period protecting a TK holder against the consequences of disclosure in the context of documentation if that disclosure was made within a specified period before the filing of the application.

Copyright and Related Rights

BEST COPY AVAILABLE

- The copyright protection of oral works;
- The protection of TK documentation through the original and non-original database protection;
- Protecting the "moral rights" of TK holders using the moral rights concept in copyright;

- Protects TK through the protection of the rights of performers, included internationally in the International Convention for the Protection of Performers, producers of Phonograms and Broadcasting Organizations, 1961, the Rome Convention and, more recently, the TRIPs Agreement, 1994[62], and the WIPO Performances and Phonograms Treaty, 1996.
- The *domain public payant* system, under which royalties continue to be paid for the use of literary and musical works in the public domain; and,
- The *droite de suite*, a resale royalty under which an artist receives a share of the price paid for his or her original work from all sales subsequent to the first sale of the work by the artist.

Unfair Competition

- The law of "passing off";
- Trade secrets protection. Certain comments on the Draft Report stressed the importance and practical utility of trade secrets protection for TK.[63]

Apart from the use of existing or modified IP laws, the development of new IP rights to protect forms of TK not covered by the existing IP system was articulated by several informants. Persons consulted on the FFMs suggested that new IP tools could be accommodated within the broad, evolutionary and adaptive conception of "intellectual property" in the WIPO Convention[64], as previously referred to.

However, in its comment on the Draft Report, the USPTO expressed a different view:

> *"The United States concurs with the Draft Report that to a certain extent intellectual property is 'evolutionary and adaptive' . . . However, it must be noted that the newer generation of intellectual property laws all share a certain characteristic with the older generation of intellectual property laws of copyright, patents, trademarks: namely, that of an incentive mechanism for innovation. As forward-looking systems that seek to encourage the development of new forms of expression and invention, the newer types of intellectual property still are based on this basic principle and share characteristics such as a date of creation, the known identity of one or more creators, defined parameters of the relevant product and limited duration of protection (or in the case of trademarks, subject to continual use). A regime to protect traditional knowledge, as many of the participants in the Fact-Finding Missions pointed out, cannot by definition adhere to these principles. Thus, developing a new intellectual property-type regime in this area does not appear to be the best fit even for the holders of such knowledge."*[65]

In its comment on the Draft Report, the Government of Canada, stated:

> *"Further analysis is necessary before there can be any consideration of a sui generis regime to protect traditional knowledge. Further research is necessary in a number of areas. For example, analysis of the numerous complaints with regard to bio-prospecting and bio-piracy, including an analysis of the differing perspectives, is necessary."*[66]

Another comment on the Draft Report stated the following:

> *"In attempting to protect traditional knowledge, an attempt should not be made to take an IP system developed by balancing competing interests in one value system, and try to make it fit a different value system. Moreover, the focus must remain on IPRs, even though the traditional knowledge for which protection is sought may also be symbolic of a deeper order or belief system, and other per se excluded subject matter noted in the draft Report. Only after a thorough review of how existing systems can be used to protect traditional knowledge can a decision be made on whether and how new systems should be developed to provide other types of protection. However, this does not mean that traditional knowledge should not be protected, only that any changes should be consistent with the underlying purpose and goals of the IP system."*[67]

Another comment on the Draft Report expressed concern at the risks and negative effects for publishers posed by proposed new IP tools to protect TK:

> *"Recognising that publishers, and in particular local publishers, greatly contribute to the dissemination and preservation of TK, IPA (the International Publishers Association) is in particular concerned with ensuring that new tools to protect TK do not negatively impact on the development of local publishing industries."*[68]

The need for an international framework for TK protection was also stressed by persons spoken to on the FFMs. Particularly with current advances in information and biological technologies, purely national systems are of limited value. A multilateral framework, under which TK can be protected in all signatory countries in the same way as any other IP, is desirable, FFM informants advised. The WIPO/UNESCO Model Provisions for National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions of 1982 was mentioned as a possible foundational basis for future standard setting at the international level. See **Box 10.**

BOX 10. IP NEEDS AND EXPECTATIONS

In the longer term:

- Development of new IP tools to protect TK not protected by existing IP tools
- Elaboration of an international framework for TK protection, using *inter alia* the 1982 Model Provisions for National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions as a possible foundation

However, the need for solutions to be first developed and tested nationally and regionally was emphasized by some. It was suggested that multilateral consensus on international norms is unlikely in the short term, and that after workable solutions have been tested and proven at the local and national levels, the evolution of an agreed international framework is more likely.[69] The idea would be first to develop and experiment with existing IP tools to protect TK, in what was described as a "bottom up" approach, before any consideration can be given to multilateral standard-setting.

The USPTO, in its comment on the Draft Report, expressed views along these lines. Noting diverse interests among and within indigenous communities in respect of TK and folklore, the USPTO questioned:

> *"Is it possible, or even desirable, to establish a comprehensive, uniform set of rules at the international level to govern the use of traditional knowledge and folklore? At the very least, we wonder whether it is advisable to undertake such activity before individual countries have, in conjunction with the communities within their own borders, established their own regimes for protection within their own territories and gained experience in the application of that protection and its effect on the communities involved. We believe that WIPO parties should consider these issues carefully."*[70]

In addition, the USPTO's comment also stated:

> *"Moreover, as the Draft Report indicates, there are so many different expectations, goals and native systems, for approaching ownership and the transgression of ownership that a useful, enforceable global system would be virtually impossible to create. Indeed, a "one size fits all" approach might be interpreted as demonstrating a lack of respect for local customs and traditions."*[71]

BEST COPY AVAILABLE

Use of IP : operational questions

Concerns as to the ability of indigenous and local communities to use the IP system effectively were expressed several times during the FFMs. Informants pointed to the unfamiliarity among TK holders with the IP system and the costs of acquiring, maintaining and enforcing IPRs. Such operational questions are perhaps as important, if not more so than, the legal questions discussed above. They are also a strand of larger concerns with "power" – the financial and political power to use and take advantage of IP, to influence the progressive development of IP law and policy and to challenge IP claims made by others. As stated during the WIPO Roundtable on Intellectual Property and Traditional Knowledge held from November 1 to 2, 1999, ". . . *if TK is inadequately protected and the innovations of firms and "modern knowledge" is protected, it is not because of incompatibility of the systems (TK and IPRs) but because of a difference in power.*"[72]

These broader questions fall beyond the scope of IP, but the more specific need to facilitate access to the IP system to enable TK holders to use it more effectively, and to provide information and assistance to TK holders to enforce their rights were keenly felt by WIPO during all the FFMs. See **Box 11**. These needs could be met, for example, by wider dissemination of IP information to indigenous and local communities, public information activities aimed specifically at TK holders, and other activities carried out by national IP offices and other agencies designed to demystify IP and to facilitate access to the national IP offices and the IP system. For example, certain national patent and trademark offices offer reduced application fees to independent inventors and small and medium-sized enterprises. If such schemes do not already apply to members of indigenous and local communities, the possibility of extending them to such persons and communities could be explored by national offices. Concerns with the high costs of litigation prompted one commentator, in its comment on the Draft Report, to suggest a voluntary system, under which private companies make voluntary payments into a central fund established in each country. The proceeds would be distributed to groups having established a claim.[73]

BOX 11. IP NEEDS AND EXPECTATIONS

- Facilitating access to the IP system, to enable TK holders to use and enforce rights under the IP system
- Provision of information, assistance and advice with respect to the enforcement of TK protection

Documentation

The need for the documentation of TK was repeated often during the FFMs. Calls for documentation were prompted by various objectives, including to:

- identify the TK that requires protection;
- preserve TK for future generations;
- make TK available for research and educational purposes;
- prevent the acquisition of IPRs over TK. See also under "Rejection of IP protection for TK" above.

Legal and technical assistance with documentation projects was requested many times. From an IP perspective, a need was perceived by WIPO for advice and information on the IP aspects and implications of documentation. More particularly, there is a need for information and training on considering IPR implications before documenting, managing the process of documentation from an IP perspective, securing and managing IPRs after documentation, and the standardization of TK documentation. Standardization should also serve other communities, such as those involved in anthropology or medical research.[74] Information and training could inform persons and institutions engaged in TK documentation about subjects such as: IP implications of existing documentation; minimum documentation required for exercise and enforcement of certain IPRs; classifying TK according to appropriate IP tools during the documentation process; use of existing IP documentation standards during TK documentation; and, the IP aspects of managing documentation data. Taking into account the prevailing documentation standards, information and training of this nature could help people involved in ongoing documentation projects to take the IP dimensions of their work into account. See **Box 12.**

BOX 12. IP NEEDS AND EXPECTATIONS

- The provision of legal/technical assistance with TK documentation, including information and advice on the IP implications of TK documentation

The USPTO, in its comment on the Draft Report, concurred with *"the critical role documentation plays, both for literary and artistic works, including folklore, and for medicinal or other traditional knowledge, particularly as a means for demonstrating prior art in the patent context."*[75] The USPTO added that such documentation is possible under the aegis of the American Folklife Center at the Library of Congress, which could be *"a role for national or regional documentation centers worldwide."* Another comment stressed the importance of recording the traditional descriptions of medicinal plants, to ensure that any commercial products benefit the indigenous peoples concerned.[76] In its comment on the Draft Report, the International Publishers Association (the IPA) also made specific references to certain initiatives and frameworks for the identification and description of objects, creations and inventions which, the IPA suggested, could be explored further in relation to TK.[77]

Access to and Benefit-Sharing in Genetic and Biological Resources

Within the context of concerns for the state of the environment and particularly the depletion of the earth's biological diversity, and in the light of the obligations of the Convention on Biological Diversity, 1992 (the CBD), several persons consulted pointed to the links between the regulation of access to and benefit-sharing in genetic and biological resources and the protection of associated TK. Specific references were made *inter alia* to Article 8(j) of the CBD. Although the FFMs were not directly concerned with access to and benefit-sharing in genetic and biological resources, much TK is associated with the custodianship and use of genetic and biological resources. Thus, all the FFMs touched upon questions related to access to and benefit-sharing in genetic and biological resources.

Many governmental and non-governmental processes and activities working towards the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising from the use of genetic resources are underway. Many of these processes and activities, including the elaboration of draft access and benefit-sharing agreements, policies, programs, "best practices", guidelines and protocols, are relevant for TK protection. Several countries and regional organizations have enacted or are considering draft access and benefit-sharing legislation or regulations which also protect TK.[78]

Most of these initiatives are taking place under the auspices of Ministries, Government Departments and other agencies responsible for or involved in implementing the CBD. As mentioned above, there is a need for:

- dialogue and contact between TK holders, the private sector, Governments, NGOs and other stakeholders to assist in development of modalities for cooperation between them, at community, national, regional and international levels (see **Box 5** above); and,
- enhanced participation by the national and regional IP offices and the IP community at large in TK-related processes in which IP issues are raised (see **Box 6** above).

Persons involved in developing access and benefit-sharing agreements, policies, programs, "best practices", guidelines, protocols, legislation or regulations expressed the need to receive IP advice and assistance in their work. See **Box 13.** However, specific advice having general application on how IP rights should be dealt with in an access and benefit-sharing arrangement to ensure that benefit-sharing is "fair and equitable" in the sense of the CBD is perhaps not possible. The diversity of legal, economic, social, cultural and political situations between and within States prevents the elaboration of prescriptive blueprints in this regard. It is likely that only general advice and information on the IP aspects of access to and benefit-sharing in genetic and biological resources will be possible.

BOX 13. IP NEEDS AND EXPECTATIONS

IP advice and assistance in respect of legislation, regulations, guidelines, protocols, agreements (including model terms), policies and processes on access to and benefit-sharing in genetic resources

Contract

FFM informants suggested that models for contractual arrangements - in the form of licenses, material transfer agreements, access agreements, information transfer agreements and the like - offer practical tools for the protection of access to and unauthorized use of TK. However, as the relative bargaining strengths of local communities and outside parties, such as commercial entities, tend to vary widely, strategies are needed to support local communities in the field of contract. This was attested to by many NGOs and other development agencies many of whom indicated their willingness to assist in this regard. Suggestions include the following:

- assistance and training for TK holders in the negotiation, drafting, implementation, and enforcement of contracts;
- the development and testing, with the close involvement of local communities, of
- "best contractual practices" and guidelines and model clauses for contracts, as well as the provision of information on and protection against "unfair contract terms."[79]

See **Box 14.**

BOX 14. IP NEEDS AND EXPECTATIONS

- Assistance and training for TK holders in the negotiation, drafting, implementation, and enforcement of contracts
- The development and testing, with the close involvement of local communities, of "best-contractual practices", guidelines and model clauses for contracts, as well as the provision of information on and protection against "unfair contract terms"

Protection of "Expressions of Folklore"

As mentioned above, several FFM informants ascribed various meanings to terms such as "traditional knowledge" and "folklore". The need for terminological clarity has already been identified (see **Box 1** above). In addition to its program on traditional knowledge, the WIPO program for 1998-99 also included a program of activities on the "Protection of Expressions of Folklore", as does the 2000-02 program.

Four regional consultations were organized by WIPO in cooperation with UNESCO, for African countries in Pretoria, South Africa (March 1999), for countries of Asia and the Pacific region in Hanoi, Viet Nam (April 1999); for Arab countries in Tunis, Tunisia (May 1999); and for countries in Latin America and the Caribbean in Quito, Ecuador (June 1999). In total 63 governments of WIPO Member States, 11 intergovernmental organizations, and five non-governmental organizations were represented at the four consultation meetings. Nineteen expert speakers on folklore and IP from the respective regions facilitated the consultation sessions.

Each of the four regional consultations adopted Resolutions or Recommendations which include proposals for future work addressed to WIPO and UNESCO, on the one hand, and to national governments of the respective regions on the other. The Recommendations and Resolutions of the four regional consultations are contained in Annex 5.

Generally, there was consensus that the WIPO workplan for folklore protection should be expanded significantly to include activities at the national, regional, and international levels. The Recommendations and Resolutions unanimously specify four activities for further work in this field: (i) the provision of legal and technical assistance on the protection of folklore; (ii) specialized training in identification, documentation (including documentation standards), conservation and dissemination of folklore; (iii) the provision of necessary financial resources to relevant national and regional centers and institutions, and (iv) the development of an effective international regime for the protection of expressions of folklore.

Economic Valuation of TK

It was apparent to WIPO staff on the FFMs that in many cases members of indigenous and local communities are unaware of the potential commercial value of their TK. While commercial value is not the only consideration in discussions concerning the conservation and protection of TK, and while the FFMs showed that TK holders are well aware of the value of their TK for food security, biodiversity conservation, health and other such matters, a need was perceived for raising awareness among TK holders as to the potential economic value of their TK and why private corporations may be interested in obtaining access to it. See **Box 15**. At the same time, it appeared necessary to ensure that expectations are not unrealistically high (see **Box 2** above),

Box 15. IP Needs and Expectations

- Awareness-raising on the potential commercial value of TK and on options for TK holders in this regard, including awareness-raising at schools, educational materials and through Distance Learning programs

However, little data exists on the economic valuation of TK, particularly of its actual contribution to the development of new products and processes. In one comment on the Draft Report, the economic valuation of TK was strongly condemned.[80] On the other hand, during the FFMs, the need to develop tools for the economic valuation of TK was expressed several times. Such an exercise goes beyond merely IP questions, however, and would require the involvement of experts from several disciplines. See **Box 16.**

Box 16. IP Needs and Expectations

- The development of tools for the economic valuation of TK

The economic valuation of TK can also play a part in determining the economic efficiency of regimes for TK protection. As the comment on the Draft Report of the National Institute for the Defense of Competition and Intellectual Property Protection of Peru (INDECOPI) pointed out, it may be argued that the protection of TK is justified only if the cost of such protection is less than the cost of the "market failure" inherent in there being no TK protection. However, as the comment also pointed out, it is not possible to quantify these costs. Furthermore, the justification for TK protection may go beyond a mere economic calculus, because TK protection may bring wider, non-economic benefits to the society as a whole.[81]

Conclusions

The potential role of IP rights in the protection of TK is an emerging field which requires thorough exploration and an active search for solutions. Although there are at present no clear, specific international IP standards for protecting such knowledge, there are a growing number of instances where individuals and organizations are resorting to existing patent, trademark or copyright systems to protect their knowledge and cultural expressions. These efforts have met with mixed success, but greater appreciation and respect for TK is drawing international attention to these issues.

Further exploration of TK protection through IP must be based upon an understanding of the context within which TK formations are generated, preserved and used, and the cultural and ethical values of their holders. Above all, future work must be informed and guided by needs and expectations of the TK holders themselves. Hence, the FFMs and this Report, the purpose of which is to identify and report on IP needs and expectations for TK protection. The main IP needs and expectations of TK holders are identified and reflected upon in this chapter, and are set out in summary form in the following box:

INTELLECTUAL PROPERTY NEEDS AND EXPECTATIONS OF TK HOLDERS

These are the needs and expectations of TK holders as identified by WIPO during the FFMs. They are not all addressable by WIPO. WIPO's future work programs will therefore not necessarily include activities responding to all of these needs and expectations.

- The selection of an appropriate term or terms to describe the subject matter for which protection is sought.
- A clear definition or description of what is meant (and not meant) for IP purposes by the term or terms selected.
- The adjustment of expectations through effective awareness raising as to the role and nature of IP protection in relation to TK.
- The prevention of the unauthorized acquisition of IPRs (particularly patents) over TK by documenting and publishing TK as searchable prior art, where so desired by the relevant TK holders.
- An analysis of how prior art is established for purposes of patent examinations in the context of TK.
- Greater awareness-raising on the IP system, particularly among sectors of society and communities unfamiliar with it, such as indigenous and local communities and governmental offices not directly involved in IP law and administration.
- Greater understanding by the IP community of the perspectives, expectations and needs of TK holders.

BEST COPY AVAILABLE

- Facilitation of dialogue and contact between TK holders, the private sector, governments, NGOs and other stakeholders to assist in development of modalities for cooperation between them, at community, national, regional and international levels.
- [illegible] participation by the national and regional IP offices and the IP community at large in [illegible] processes in which IP issues are raised.
- Study of the relationship between collectivity of TK and IPRs, more particularly testing of [illegible] for the collective acquisition, management and enforcement of IPRs by TK holders' associations, including the [illegible] of collective management of IPRs to TK.
- Study [illegible] customary laws and protocols in local and traditional communities, including conclusions [illegible] the formal IP [illegible]
- In the shorter term, testing the applicability and use of existing IP tools for TK protection, through [illegible] technical community level pilot projects and case studies, and provision of technical information [illegible] and [illegible] on possible options under the existing categories of IP for TK protection.
- [illegible] information and training to TK holders and government officials [illegible] the IPS [illegible] for TK protection.
- In the longer term, the possible development of new IP tools to protect TK not protected by existing [illegible] of an international framework for TK protection, using [illegible] the WIPO-UNESCO Model [illegible] on the Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions, 1982 [illegible] the development of a *sui generis* system of "community" or "collective" rights to protect TK.
- [illegible] access to the IP system, to enable TK holders to use and enforce rights under the [illegible]
- The provision of information, assistance and advice with respect to the enforcement of TK [illegible]
- The provision of legal technical assistance with TK documentation, including information and [illegible] TK documentation.
- The provision of IP advice and assistance in respect of legislation, regulations, guidelines, protocols, agreements (including [illegible] terms), policies and processes on access to and benefit sharing in genetic resources.
- Assistance and training for TK holders in the negotiation, drafting, implementation, and enforcement of contracts.
- The development and testing, with the close involvement of indigenous peoples and local communities, of "best contractual practices", guidelines and model clauses for contracts, as well as the provision of information and [illegible] against "unfair contract terms."
- Awareness raising on the potential commercial value of TK and the development of tools for the economic valuation of TK.

BEST COPY AVAILABLE

It is evident that some of the needs and expectations conflict, or reflect competing policy objectives. We have not attempted to mediate the needs or "resolve" conflicts, but rather to report as fully as possible on the information received from FFM informants. WIPO recognizes that it cannot address all these needs, and a collaborative effort by other relevant organizations and processes would be desirable. The needs as identified pose challenges for the entire IP community – national and regional IP offices, collective management societies, the private sector, NGOs, civil society, consumers, and the international community, including WIPO and its Member States. As the chapters on the FFMs show, many persons consulted expressed needs and expectations specifically addressed to their respective national governments, which have a key role to play.

Further exploration of the role of IP in TK protection also requires a technical understanding of IP and its application in the specifics of concrete uses of TK (in other words, it is more helpful to test the functionality of IP in relation to specific cases, than in a theoretical or ideological context). In addition, WIPO agrees with the comment of the Future Harvest Centres supported by the CGIAR that effective IP systems that protect and maintain TK will depend on a better understanding of the various systems of innovation and intellectual property (formal and customary) and, equally, upon the participation of all stakeholders, governments and local communities in the process.[82] For its part, as the specialized United Nations agency responsible for the promotion of IP worldwide, WIPO is committed to continuing to address conceptual problems and undertake a practical and technical examination of the application of IP rights to various forms of TK in order to provide an informed and realistic analysis.[83]

An efficient IP system that protects TK will promote continued creation and innovation based on that knowledge. IP is not only about conferring property rights. It is also about recognition of and respect for the contributions of human creators. From this perspective, IP has a very important role to play in protecting the dignity of holders of TK and, by recognizing property rights in relation to such knowledge, giving those holders a degree of control of its use by others. The protection of TK also benefits third parties, who are able to enjoy access to protected tradition-based innovation and creation that may not be collected, recorded, or find channels of distribution without IP protection.

The FFMs have shown the richness and diversity of TK on a global scale, both in terms of its inherent creativity and as potential subject matter for protection. The IP system cannot, however, respond fully to all the needs of TK holders. Many of the problems encountered by TK holders are less "legal" than "operational" – TK holders (as do some other sectors of society) often lack the know-how and financial resources to take advantage of the IP system, whether in its present or in an evolved form, and they need support in this respect. There are nevertheless certain conceptual difficulties. However, the fact that existing standards of IP may not be in perfect harmony with elements of TK worthy of protection, should not be seen as an insuperable obstacle. IP has consistently evolved to protect new subject matter, such as software and layout-designs, the emergence of which was unforeseeable even twenty years earlier. Copyright protection has been extended to the digital environment. IP is now moving forward to protect databases. Given its evolutionary and adaptive nature, it is not inconceivable that IP principles might provide effective protection for traditional knowledge.

PostScript

WIPO's Activities Under the 2000-01 Program and Budget

Based on its exploratory work in the 1998-1999 biennium, WIPO is continuing its work on TK and expressions of folklore in the 2000-2001 biennium. Several Main Programs in the Program and Budget for the 2000-2001 biennium[84] contain proposed activities relating to these issues, including the Main Program on Global Intellectual Property Issues.

These activities respond directly to many of the needs and expectations identified during the FFMs. They include:

1. **The development of information materials on options under the existing IP system for the protection of TK**
   These materials will provide practical information on options for the protection of TK under the IP system. The materials will be aimed at two main target groups, being TK holders and the national IP offices responsible for the administration of the IP system in each country. The materials will form the basis of WIPO's TK-related training activities, including the workshops referred to below. The materials will also be widely disseminated. The same materials will also form the basis of an IP/TK Distance Learning Course to be offered by WIPO. The Distance Learning Program of the WIPO Academy takes full advantage of information technology and the Internet, offering new teaching methods, specially designed course materials, evaluation tools, tailored means of delivery, and expanded audiences. A six part Introduction to Intellectual Property course has been developed and tested, and has been available to a worldwide audience since October, 1999, in English, French and Spanish. Teaching takes place in the virtual environment of the WIPO Academy's web site at <http://academy.wipo.int>. Further information is available at this website. It is expected that the new Distance Learning Course on IP and TK will be available in due course.

2. **Practical information and training workshops on the IP system and the protection of TK**
   The workshops will provide information and training on the IP system and the protection of TK to TK holders and other persons at the grassroots level, and to national IP offices. The workshops will be based on the written information materials referred to above. In addition to these workshops, TK protection is now almost invariably included in the programs for the many training activities organized by WIPO's Cooperation for Development sector.

3. **IP information, training and standards for the documentation of TK**
   The activity would pursue two practical results: (1) it will allow TK documentation initiatives to manage IPRs during the TK documentation process, and (2) it will allow national IP offices to integrate the TK documentation from those initiatives into their existing procedures for filing, examining and granting of IPRs under the existing IP system. For example, by integrating TK documentation into existing procedures and IP information systems, IP offices could include TK documentation into their prior art searches when examining applications for patents in respect of TK-based inventions. The output of the activity would be practical information materials on managing IPRs during the documentation process, written in a "How To"-format and accessible to users with limited IP-background. The information materials would be applied in practical training workshops on IPR management for communities and key documentation institutions. The workshops would seek to link communities, documentation initiatives, and national IP offices so as to initiate cooperation between IP offices and TK documentation initiatives at the national level

4. **Practical studies of actual examples in which TK protection has been sought under the IP system**
   The activity will provide practical information on specific and actual examples in which indigenous and local communities have taken advantage of, or attempted to use, the IP system to either protect their TK or to further their own interests in the commercial application and utilization of their TK. The output of the activity will include practical information on difficulties and successes experienced in applying the IP system to TK, lessons learned and divergences between identified needs of TK holders and the protection provided by the existing IP system. The results of the activity will be disseminated and used in WIPO's training activities. This kind of activity seeks to provide information on the extent and limits of TK protection under existing IP regimes. A need for such information was identified by the Government of Canada in its comment on the draft Report.[85]

5. **Feasibility studies on the applicability of customary laws and protocols to TK**
   TK holders are subject to both customary and modern legal systems, since their knowledge constitutes subject matter to which both may apply. The interfaces, similarities and differences between customary

and modern legal systems require understanding and management. This activity would seek ways to manage the relationship between modern and customary understandings of IPRs over TK subject matter. It would record customary law systems and related cultural understandings relevant for TK protection and draw implications on how the IP system may recognize and use customary law to manage the relationship with TK holders. A need for studies of this nature was identified by the Government of Canada in its comment on the draft Report.[86]

6. **A pilot project on collective acquisition, management and enforcement of IPRs in TK**
   One of the problems in the IP/TK field is the collectivity of creation and ownership of TK. This activity would specifically address this issue by exploring options for the collective acquisition, administration and enforcement of IPRs by TK holders' associations. It would seek to examine the capacity of a selected community or TK holder association to acquire, collectively exercise and enforce all relevant IPRs on behalf of the holders.

Developments at WIPO Subsequent to the Publication of the Draft Report

At the Twenty-Sixth Session of the General Assembly of the Member States of WIPO, held in Geneva from September 25 to October 3, 2000, the Member States of WIPO established an Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore. The Intergovernmental Committee will constitute a forum in which discussions can proceed among Member States on three primary themes, namely intellectual property issues that arise in the context of (i) access to genetic resources and benefit sharing; (ii) protection of traditional knowledge, whether or not associated with those resources; and (iii) the protection of expressions of folklore, including handicrafts.

Each one of these themes cuts across the conventional branches of intellectual property law and does therefore not fit into existing WIPO bodies, such as the Standing Committee on the Law of Patents, the Standing Committee on Copyright and Related Rights, the Standing Committee on Trademarks, Industrial Designs and Geographical Indications, and the Standing Committee on Information Technologies. At the same time, the three themes are closely interrelated, and none can be addressed effectively without considering aspects of the others.

The Intergovernmental Committee will be open to all Member States of WIPO. As is usual in WIPO bodies, relevant intergovernmental organizations and accredited international and regional non-governmental organizations will be invited to participate in an observer capacity. The Committee will hold its first session in the Spring of 2001.

Comments on the Draft Report Relating to Future WIPO Activities

In comments on the Draft Report, several suggestions and comments were made relating to future WIPO and Member State activities on TK and expressions of folklore. To the extent possible, these suggestions and comments have been referred to above. Additional comments and suggestions are the following:

- As part of its follow-up to the Report and ongoing study, WIPO may wish to consider analyzing where, territorially, the major problems exist regarding different aspects of TK protection, for example whether within communities, between communities, outside of communities but within the country, or at the international level.[87]
- An important question for WIPO to address in its future work on TK, including the work of WIPO's Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, is how to ensure the involvement of indigenous people. There should be a means for indigenous people to be involved in the Committee discussions.[88]
- Technical assistance should be provided to the TK and/or genetic resources custodians and local communities so that they will be able to add value to their innovations and genetic resources and enhance their capacity in sustainable genetic resources utilization.[89]

- WIPO and national IP offices should cooperate to provide legal and technical assistance, where applicable, to holders of commercially valuable TK. One key element of this assistance could be to help develop means of exploiting TK through applying current IP tools, such as certification marks, collective marks, licensing, and so on, and the law of copyright for works of original authorship, where relevant. National IP offices are in the best position to explain how various forms of IP protection might be claimed in each country.[90]
- Future WIPO consultations and meetings should include more indigenous persons.[91]
- WIPO could seek Member State approval to undertake a study, as part of current Program and Budget expenditure levels, of the experiences of those countries that have implemented regional or international model laws concerning the protection of folklore and TK to shed light on the benefits and challenges faced by them.[92]
- WIPO should organize further meetings for TK holders to provide information on their needs and expectations, because most TK holders lack the means to validate their TK.[93]
- In future work, issues concerning the loss of plant genetic resources should be analyzed separately from issues concerning the loss of cultural or folklore diversity. A second companion Report could discuss these issues separately and in more depth.[94]
- The final Report should be widely circulated to all relevant stakeholders, especially multinational corporations, legal bodies, tertiary research institutions and relevant NGOs. [95]
- Developing countries and TK holders' communities should be involved in discussions on IP and TK and be part of the consultation process when new IP tools are prepared.[96]
- Additional stakeholders that should be included in future work would be museums, libraries, archives and research institutes.[97]

Notes

[1] Sub-program 11.1 "Intellectual Property Rights for New Beneficiaries", Main Program 11, WIPO Program and Budget 1998-99.

[2] *Idem.*

[3] Comment on the Draft Report by the Indigenous Peoples' Secretariat, Denmark, January 15, 2001. See also comment on Draft Report by the Future Harvest Centres supported by the CGIAR, dated November 3, 2000.

[4] WIPO Program and Budget, 1998 and 1999.

[5] Comment on the Draft Report by Professor Margaret Chon, Associate Professor of Law, Seattle University School of Law, and Professor Shubha Ghosh, Visiting Professor of Law, University at Buffalo, State University of New York, dated November 3, 2000.

[6] Comment of the Future Harvest Centres supported by the CGIAR, dated November 3, 2000.

[7] S. Le Gall, Letter to WIPO, January 9, 2000.

[8] D. Nakashima, "Conceptualizing Nature: The Cultural Context of Resource Management", 34 (1998) Nature Resources, UNESCO B, p. 18.

[9] Comment on the Draft Report by General Directorate of Industrial Development, Ministry of Trade and Industrial Development, Gabon, dated March 9, 2001.

[10] Comment of the Future Harvest Centres supported by the CGIAR, dated November 3, 2000.

[11] Comment on Draft Report from the USPTO, dated January 26, 2001.

[12] Comment on Draft Report by the Future Harvest Centres supported by the CGIAR, dated November 3, 2001. See also the Comment on the Draft Report by Ms. Jane Anderson, PhD student, University of New South Wales, dated October 31, 2000.

[13] IUCN Inter-Commission Task Force on Indigenous Peoples, *Indigenous Peoples and Sustainability: Cases and Actions* (IUCN and International Books, Utrecht, 1997); M.L. Oldfield and J.B. Alcorn "Conservation of Traditional Agroecosystems", in M.L. Oldfield and J.B. Alcorn (Eds.), *Biodiversity: Culture, Conservation and Ecodevelopment* (Boulder, San Francisco and London, 1991); G. Dutfield, "The Public and Private Domains: Intellectual Property Rights in Traditional Knowledge" (2000), Vol. 1, No. 3, Science Communication, pp. 276-277.

[14] See also Comment on the Draft Report by Dr. Aboubacar Fall, Advocate, Dakar, Senegal, received November 30, 2000.

[15] Comment on the Draft Report by Ecolomics International, Switzerland, dated December 9, 2000.

[16] Comment on the Draft Report of the Government of Canada, dated February 19, 2001.

[17] Comment on the Draft Report of the USPTO, dated January 26, 2001.

[18] Comment on the Draft Report of INDECOPI, dated January 2, 2001.

[19] Comment on the Draft Report of the Government of Canada, dated February 19, 2001.

[20] Comment on the Draft Report by the Future Harvest Centres supported by the CGIAR, dated November 3, 2000.

[21] Article 2(viii), WIPO Convention.

[22] In her comment on the Draft Report, Prof. Penny Bernard, Anthropology Department, Rhodes University, Grahamstown, South Africa, dated December 13, 2000, was concerned by the exclusion of "spiritual beliefs", because TK, specifically medicinal knowledge, "results from ancestral and spiritual inspiration." TK is thus "difficult to extract from its spiritual context". This is indeed so and is recognised elsewhere in the Report. The point being made here, however, is that the spiritual beliefs, as such, separated from specific TK formations, are not protectable IP subject matter. See, for example, the 1982 WIPO-UNESCO Model Provisions for National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and other Prejudicial Actions, 1982 (the "Model Provisions"). Section 2 of the Model Provisions provides that "expressions of folklore" are understood as productions consisting of characteristic elements of the traditional artistic heritage developed and maintained by a community in the country or by individuals reflecting the traditional artistic expectations of such a community. Only "artistic" heritage is covered by the Model Provisions. This means that, among other things, traditional beliefs, scientific views (e.g. traditional cosmogony) or merely practical traditions as such, separated from possible traditional artistic forms of their expression, do not fall within the scope of the proposed definition of "expressions of folklore."

[23] In its comment on the Draft Report, the International Center for Technology Assessment, United States of America, dated October 27, 2000, was concerned by suggestions that TK that does not fall within the scope of the term "intellectual property" is not "at risk of usurpation by patents".

[24] For this approach, see for example M. Brown, "Can Culture be Copyrighted?", 49, 2, *Current Anthropology,* (1998), p. 193.

[25] See for example: P. Jaszi, and M. Woodmansee, "The Ethical Reaches of Authorship", (1996), 95 *The South Atlantic Quarterly,* p. 947; J. Boyle, *Of Shamans, Software and Spleens* (Harvard University Press, Cambridge, Mass. and London, 1996); D. Posey and G. Dutfield, *Beyond Intellectual Property* (International Development Research Centre, Ottawa, 1996); G. Dutfield, *Intellectual Property Rights, Trade and Biodiversity: Seeds and Plant Varieties* (IUCN and Earthscan Publications, London, 2000), ; G. Dutfield, *Can the TRIPs Agreement Protect Biological and Cultural Diversity*, 10, (Biopolicy International Series, 1997); C. Horton, "Protecting Biodiversity and Cultural Diversity Under Intellectual Property Law: Toward a New International System" (1995) 10 *J.Envtl. Law and Litigation*; S. Mills, "Indigenous Music and the Law: An Analysis of National and International Legislation", (1996) Yearbook for Traditional Music, 57; T. Simpson, *Indigenous Heritage and Self-Determination* (1997); "Indigenous Peoples' Knowledge and Intellectual Property Rights", Proceedings of the Indigenous Peoples' Knowledge and Intellectual Property Rights Consultation, Organized by the Pacific Concerns Resource Center. April 24-27, 1995 Suva, Fiji; Julayinbul Statement on Indigenous Intellectual Property Rights, 1993; Kari-Oca Declaration and Indigenous Peoples Earth Charter, 1992; Mataatua Declaration on Cultural and Intellectual Property Rights of Indigenous Peoples, 1992. Certain comments on the Draft Report were also sceptical of or opposed to the use of existing IP tools. For example, the comments by the International Center for Technology Assessment, United States of America, dated October 27, 2000; the Gaia Foundation, dated February 1, 2001; Prof. Penny Bernard, Anthropology Department, Rhodes University, Grahamstown, South Africa, dated December 13, 2000; Association for the Defence of Mutual Rights (ADN), Peru, dated April 5, 2001.

[26] D. Posey, "Protecting Indigenous Rights to Diversity" (1996) 38/3 *Environment* 7, quoted in J. Tunney, "E.U., I.P., Indigenous People and the Digital Age: Intersecting Circles", 9 [1998] E.I.P.R. 335, p. 336.

[27] J. Tunney, *op. cit.*, p. 336.

[28] See G. Dutfield, "The Public and Private Domains: Intellectual Property Rights in Traditional Knowledge" (2000) Vol. 21, No.3, *Science Communication*, p. 278.

[29] See G. Dutfield, *Intellectual Property Rights, Trade and Biodiversit, op.cit.*, pp. 64-65.

[30] Request for Reexamination of U.S. Plant Patent No. 5, 751, March 30, 1999 (Ayahuasca)

[31] *Op. cit* Tunney, p. 336.

[32] See, for example, Request for Reexamination of U.S. Plant Patent No. 5, 751, March 30, 1999 (Ayahuasca).

[33] Comment on the Draft Report by the Indigenous Peoples Secretariat, Denmark, January 15, 2001.

[34] D. Downes, , "How Intellectual Property could be a Tool to Protect Traditional Knowledge", , (2000) Columbia Journal of Environmental Law 25, pp. 253-282..

[35] Downes, *op.cit*, p. 258..

[36] Comment on the Draft Report by the International Centre for Technology Assessment, United States of America, dated October 27, 2000.

[37] Statement by Anil Gupta at WIPO Roundtable on Intellectual Property and Traditional Knowledge, Geneva, November 1 and 2, 1999. See also Downes, *op. cit.*, p.3; Chand *et al*, "Contracts for 'Compensating' Creativity: Framework for Using Market and Non-Market Instruments for Rewarding Grassroots Creativity and Innovation", Paper prepared for Forum Belem: Paths of Sustainable Development, November 1996; and, "Traditional Knowledge: A Holder's Practical Perspective", Varma, Shri Sundaram, SRISTI, Paper presented at WIPO Roundtable on Intellectual Property and Traditional Knowledge, Geneva, November 1 and 2, 1999.

[38] Comment on Draft Report by the Future Harvest Centres supported by the CGIAR, dated November 3, 2000.

[39] Comment on the Draft Report by Prof. Penny Bernard, Anthropology Department, Rhodes University, Grahamstown, South Africa, dated December 13, 2000.

[40] See, for example, P. Drahos, "Indigenous Knowledge, Intellectual Property and Biopiracy: Is a Global Bio-Collecting Society the Answer?", (2000) E.I.P.R. 6, pp. 245-250.

[41] Dutfield, *op. cit.*, 281.

[42] Quoted in H. Marrie, "The Convention on Biological Diversity, Intellectual Property Rights and the Protection of Traditional Ecological Knowledge", Masters Dissertation, Law School, Macquarie University, Australia, July 20, 1998, section 5.4.

[43] Article 8.

[44] See Articles 12 and 33. Draft United Nations Declaration on the Rights of Indigenous Peoples, August 26, 1994 (E/CN.4/1995/2; E/CN.4/Sub.2/1994/56).

[45] See Principle 4. Principles and Guidelines for the Protection of the Heritage of Indigenous People (E/CN.4/Sub.2/1995/26).

[46] Now the Sub-Commission on the Promotion and Protection of Human Rights.

[47] Dutfield, *op. cit.*, p. 281.

[48] *Ibid.*

[49] Brown, *op cit.*, p. 204.

[50] Dutfield, op. cit., p. 287

[51] This approach is described as a "third approach" by I. McDonald, *Protecting Indigenous Intellectual Property* (Australian Copyright Council, Sydney, 1998), p. 11.

[52] Comment on Draft Report by the Future Harvest Centres supported by the CGIAR, dated November 3, 2000.

[53] Comment on Draft Report by the Future Harvest Centres supported by the CGIAR, dated November 3, 2000.

[54] Comment on the Draft Report by Professor Margaret Chon, Associate Professor of Law, Seattle University School of Law, and Professor Shubha Ghosh, Visiting Professor of Law, University at Buffalo, State University of New York, dated November 3, 2000.

[55] Downes, D., "Using Intellectual Property as a Tool to Protect Traditional Knowledge: Recommendations for Next Steps", Draft CIEL Discussion Paper prepared for the Convention on Biological Diversity Workshop on Traditional Knowledge, November 1997, p.7; Dutfield, *op. cit.*, pp. 283-284.

[56] Comment on the Draft Report by Mr. Graham Dutfield, Researcher, Oxford Centre for the Environment, Ethics and Society, dated December 12, 2000.

[57] Comment on Draft Report from KIPO, dated February 13, 2001.

[58] For example, the comment on the Draft Report by the Arts Law Centre of Australia, dated October 27, 2000. In its comment, the Arts Law Centre describes several practical cases in which it has provided legal and other forms of assistance to Indigenous Australians. See also the Comment on the Draft Report by FICPI, dated January 8, 2001. FICPI provides extensive training and education courses for industrial property attorneys. In its comment, FICPI also warns that the liberalization of the requirements for rights of representation by patent attorneys, may concentrate patent work in a small number of countries, thus reducing the number of patent professionals in the remaining countries able to advise, amongst others, TK holders. See also comments by the International Publishers Association, dated December 15, 2000; the Western Pacific Regional Office, World Health Organization (WHO), dated January 16, 2001.

[59] Comment on Draft Report from KIPO, dated February 13, 2001.

[60] See Comment on the Draft Report by Ms. Jane Anderson, PhD student, University of New South Wales, dated October 31, 2000.

[61] Comment on Draft Report from KIPO, dated February 13, 2001.

[62] Article 14.

[63] For example, the comment on the Draft Report by the International Centre for Technology Assessment, the United States of America, dated October 27, 2000.

[64] Article 2(viii).

[65] Comment on Draft Report from USPTO, dated January 26, 2001.

[66] Comment on Draft Report from the Government of Canada, dated February 19, 2001.

[67] Comment on the Draft Report by FICPI, dated January 8, 2001.

[68] Comment on the Draft Report by the International Publishers Association, dated December 15, 2000.

[69] See also comment by the International Publishers Association, dated December 15, 2000.

[70] Comment on Draft Report from the USPTO, dated January 26, 2001.

[71] Comment on Draft Report from USPTO, dated January 26, 2001.

[72] Record of WIPO Roundtable on Intellectual Property and Traditional Knowledge, Geneva, November 1 to 2, 1999, pp. 4-5. See also Comment on the Draft Report by Ms. Jane Anderson, PhD student, University of New South Wales, Australia, dated October 31, 2000.

[73] Comment on the Draft Report by The Alumni Association of Natural Medicine Practitioners, Inc., Australia, dated September 12, 2000.

[74] See also Comment on the Draft Report by Prof. Penny Bernard, Anthropology Department, Rhodes University, Grahamstown, South Africa, dated December 13, 2000.

[75] Comment on Draft Report from the USPTO, dated January 26, 2001.

[76] Comment on the Draft Report by The Alumni Association of Natural Medicine Practitioners, Inc., Australia, dated September 12, 2000.

[77] Comment on the Draft Report by the International Publishers Association, dated December 15, 2000.

[78] Such as the Philippines, Costa Rica, the Andean Pact countries, the Organization of African Unity and the ASEAN countries.

[79] Comment on the Draft Report by the International center for Technology Assessment, United States of America, dated October 27, 2000.

[80] Comment on the Draft Report by the International center for Technology Assessment, United States of America, dated October 27, 2000.

[81] Comment on the Draft Report of INDECOPI, dated January 2, 2001.

[82] Comment on Draft Report by the Future Harvest Centres, dated November 3, 2000.

[83] In its comment on the Draft Report, dated February 19, 2001, the Government of Canada suggested that , while the list of Needs and Expectations serves as a useful summary, it may be useful for WIPO to attempt to prioritize the importance of the items and to identify which of them fall within its mandate. The comment continues: "A related question concerns the extent to which WIPO, national governments, indigenous peoples and their communities, and other organizations would be capable of addressing many of the operational problems identified by TK holders and included in the list. The operational problems identified relate to the need for legal awareness, access to the legal system, enforcement of IP rights, and assistance in the enforcement of TK protection, TK documentation and contracts for TK protection."

[84] See at <www.wipo.int> The Main Program of the Global Intellectual Property Issues Division in the WIPO Program and Budget for 2000-01 is Main Program 11.

[85] Comment on Draft Report of Government of Canada, dated February 19, 2001.

[86] Comment on Draft Report of Government of Canada, dated February 19, 2001.

[87] Comment on Draft Report of Government of Canada, dated February 19, 2001.

[88] Comment on Draft Report of Government of Canada, dated February 19, 2001.

[89] Comment on Draft Report from KIPO, dated February 13, 2001.

[90] Comment on Draft Report from the USPTO, dated January 26, 2001.

[91] Comment on the Draft Report by The Alumni Association of Natural Medicine Practitioners, Inc., Australia, dated September 12, 2000.

[92] Comment on Draft Report from the USPTO, dated January 26, 2001.

[93] Comment on the Draft Report by General Directorate of Industrial Development, Ministry of Trade and Industrial Development, Gabon, dated March 9, 2001.

[94] Comments on the Draft Report by Ecolomics International, Switzerland, dated December 9, 2000, and Mr. Urs P. Thomas, Geneva, Switzerland, dated December 8, 2000.

[95] Comment on the Draft Report by Prof. Penny Bernard, Anthropology Department, Rhodes University, Grahamstown, South Africa, dated December 13, 2000.

[96] Comment on the Draft Report by the Western Pacific Regional Office, World Health Organization (WHO), dated January 16, 2001.

[97] Comment on the Draft Report by Dr. Manton M. Hirst, dated October 25, 2000.

Annexes

ANNEX 1

Contracting Parties of Treaties Administered by WIPO

Convention Establishing the World Intellectual Property Organization
WIPO Convention (1967), amended in 1979
Status on February 15, 2001

State	Date on which State became member of WIPO	Member also of Paris Union (P) and/or Berne Union (B)	
Albania	June 30, 1992	P	B
Algeria	April 16, 1975	P	B
Andorra	October 28, 1994	–	–
Angola	April 15, 1985	–	–
Antigua and Barbuda	March 17, 2000	P	B
Argentina	October 8, 1980	P	B
Armenia	April 22, 1993	P	B
Australia	August 10, 1972	P	B
Austria	August 11, 1973	P	B
Azerbaijan	December 25, 1995	P	B
Bahamas	January 4, 1977	P	B
Bahrain	June 22, 1995	P	B
Bangladesh	May 11, 1985	P	B
Barbados	October 5, 1979	P	B
Belarus	April 26, 1970	P	B
Belgium	January 31, 1975	P	B
Belize	June 17, 2000	P	B
Benin	March 9, 1975	P	B
Bhutan	March 16, 1994	P	–
Bolivia	July 6, 1993	P	B
Bosnia and Herzegovina	March 1, 1992	P	B
Botswana	April 15, 1998	P	B
Brazil	March 20, 1975	P	B
Brunei Darussalam	April 21, 1994	–	–
Bulgaria	May 19, 1970	P	B
Burkina Faso	August 23, 1975	P	B
Burundi	March 30, 1977	P	–
Cambodia	July 25, 1995	P	–
Cameroon	November 3, 1973	P	B
Canada	June 26, 1970	P	B
Cape Verde	July 7, 1997	–	B
Central African Republic	August 23, 1978	P	B
Chad	September 26, 1970	P	B
Chile	June 25, 1975	P	B
China	June 3, 1980	P	B
Colombia	May 4, 1980	P	B
Congo	December 2, 1975	P	B
Costa Rica	June 10, 1981	P	B
Côte d'Ivoire	May 1, 1974	P	B
Croatia	October 8, 1991	P	B
Cuba	March 27, 1975	P	B
Cyprus	October 26, 1984	P	B
Czech Republic	January 1, 1993	P	B

Democratic People's Republic of Korea	August 17, 1974	P	–
Democratic Republic of the Congo	January 28, 1975	P	B
Denmark	April 26, 1970	P	B
Dominica	September 26, 1998	P	B
Dominican Republic	June 27, 2000	P	B
Ecuador	May 22, 1988	P	B
Egypt	April 21, 1975	P	B
El Salvador	September 18, 1979	P	B
Equatorial Guinea	June 26, 1997	P	B
Eritrea	February 20, 1997	–	–
Estonia	February 5, 1994	P	B
Ethiopia	February 19, 1998	–	–
Fiji	March 11, 1972	–	B
Finland	September 8, 1970	P	B
France	October 18, 1974	P	B
Gabon	June 6, 1975	P	B
Gambia	December 10, 1980	P	B
Georgia	December 25, 1991	P	B
Germany	September 19, 1970	P	B
Ghana	June 12, 1976	P	B
Greece	March 4, 1976	P	B
Grenada	September 22, 1998	P	B
Guatemala	April 30, 1983	P	B
Guinea	November 13, 1980	P	B
Guinea-Bissau	June 28, 1988	P	B
Guyana	October 25, 1994	P	B
Haiti	November 2, 1983	P	B
Holy See	April 20, 1975	P	B
Honduras	November 15, 1983	P	B
Hungary	April 26, 1970	P	B
Iceland	September 13, 1986	P	B
India	May 1, 1975	P	B
Indonesia	December 18, 1979	P	B
Iraq	January 21, 1976	P	–
Ireland	April 26, 1970	P	B
Israel	April 26, 1970	P	B
Italy	April 20, 1977	P	B
Jamaica	December 25, 1978	P	B
Japan	April 20, 1975	P	B
Jordan	July 12, 1972	P	B
Kazakhstan	December 25, 1991	P	B
Kenya	October 5, 1971	P	B
Kuwait	July 14, 1998	–	–
Kyrgyzstan	December 25, 1991	P	B
Lao People's Democratic Republic	January 17, 1995	P	–
Latvia	January 21, 1993	P	B
Lebanon	December 30, 1986	P	B
Lesotho	November 18, 1986	P	B
Liberia	March 8, 1989	P	B
Libyan Arab Jamahiriya	September 28, 1976	P	B
Liechtenstein	May 21, 1972	P	B
Lithuania	April 30, 1992	P	B
Luxembourg	March 19, 1975	P	B

Madagascar	December 22, 1989	P	B
Malawi	June 11, 1970	P	B
Malaysia	January 1, 1989	P	B
Mali	August 14, 1982	P	B
Malta	December 7, 1977	P	B
Mauritania	September 17, 1976	P	B
Mauritius	September 21, 1976	P	B
Mexico	June 14, 1975	P	B
Monaco	March 3, 1975	P	B
Mongolia	February 28, 1979	P	B
Morocco	July 27, 1971	P	B
Mozambique	December 23, 1996	P	–
Myanmar	May 15, 2001	–	–
Namibia	December 23, 1991	–	B
Nepal	February 4, 1997	–	–
Netherlands	January 9, 1975	P	B
New Zealand	June 20, 1984	P	B
Nicaragua	May 5, 1985	P	B
Niger	May 18, 1975	P	B
Nigeria	April 9, 19 95	P	B
Norway	June 8, 1974	P	B
Oman	February 19, 1997	P	B
Pakistan	January 6, 1977	–	B
Panama	September 17, 1983	P	B
Papua New Guinea	July 10, 1997	P	–
Paraguay	June 20, 1987	P	B
Peru	September 4, 1980	P	B
Philippines	July 14, 1980	P	B
Poland	March 23, 1975	P	B
Portugal	April 27, 1975	P	B
Qatar	September 3, 1976	P	B
Republic of Korea	March 1, 1979	P	B
Republic of Moldova	December 25, 1991	P	B
Romania	April 26, 1970	P	B
Russian Federation	April 26, 1970	P	B
Rwanda	February 3, 1984	P	B
Saint Kitts and Nevis	November 16, 1995	P	B
Saint Lucia	August 21, 1993	P	B
Saint Vincent and the Grenadines	August 29, 1995	P	B
Samoa	October 11, 1997	–	–
San Marino	June 26, 1991	P	–
Sao Tome and Principe	May 12, 1998	P	–
Saudi Arabia	May 22, 1982	–	–
Senegal	April 26, 1970	P	B
Seychelles	March 16, 2000	–	–
Sierra Leone	May 18, 1986	P	–
Singapore	December 10, 1990	P	B
Slovakia	January 1, 1993	P	B
Slovenia	June 25, 1991	P	B
Somalia	November 18, 1982	–	–
South Africa	March 23, 1975	P	B
Spain	April 26, 1970	P	B
Sri Lanka	September 20, 1978	P	B
Sudan	February 15, 1974	P	B
Suriname	November 25, 1975	P	B
Swaziland	August 18, 1988	P	B
Sweden	April 26, 1970	P	B
Switzerland	April 26, 1970	P	B

Tajikistan	December 25, 1991	P	B
Thailand	December 25, 1989	–	B
The former Yugoslav Republic of Macedonia	September 8, 1991	P	B
Togo	April 28, 1975	P	B
Trinidad and Tobago	August 16, 1988	P	B
Tunisia	November 28, 1975	P	B
Turkey	May 12, 1976	P	B
Turkmenistan	December 25, 1991	P	–
Uganda	October 18, 1973	P	–
Ukraine	April 26, 1970	P	B
United Arab Emirates	September 24, 1974	P	–
United Kingdom	April 26, 1970	P	B
United Republic of Tanzania	December 30, 1983	P	B
United States of America	August 25, 1970	P	B
Uruguay	December 21, 1979	P	B
Uzbekistan	December 25, 1991	P	–
Venezuela	November 23, 1984	P	B
Viet Nam	July 2, 1976	P	–
Yemen	March 29, 1979	–	–
Yugoslavia	October 11, 1973	P	B
Zambia	May 14, 1977	P	B
Zimbabwe	December 29, 1981	P	B

(Total: 176 States)

ANNEX 2

Terms of Reference for FFMs

Sub-program 11.1 of the WIPO Program and Budget for the 1998-99 biennium provides for fact-finding missions (FFMs) on the traditional knowledge, innovations and practices of indigenous and local communities to be conducted in various regions.

Objectives

The objective of the FFMs is to *identify and explore* the intellectual property needs, rights and expectations of the holders of traditional knowledge and innovations, in order to promote the contribution of the intellectual property system to their social, cultural and economic development.

As their starting point, the FFMs will use the definition of "traditional knowledge and innovations" (TK) from a related international instrument, namely "knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles" (Art.8(j), Convention on Biological Diversity (CBD)).

The aim of the FFMs is not to document traditional knowledge, innovations and practices *per se*, but rather to objectively identify the intellectual property needs, rights and expectations of TK-holders by using scientifically validated empirical research methods.

Activity

The FFMs will take place with prior informed consent from the holders of traditional knowledge and the perspective governments. The FFM-staff will enter the field with the guidance of locally knowledgeable persons or TK-experts, who have conducted previous research and work to document and protect traditional knowledge of the indigenous and local communities in the area.

While the primary informants for the FFMs are indigenous and local communities as well as their representatives, the preferred range of informants includes a wide spectrum of parties which have an interest in, or expertise in, traditional knowledge, including government officials, research institutes, NGOs, religious institutions, community organizations, village councils, etc. No data will be collected and analyzed where forms of TK are held to be secret or sacred by communities or informants. All information exchanged and the interim data-analysis will be repatriated directly to the indigenous communities or other informants in the form of interim reports (see below), in keeping with Art.17(2) of the CBD.

The methods of data-collection will be (i) gathering of documents, (ii) semi-structured interviews and (iii) participatory observation with the aforementioned informants. Considering the high local specificity of TK, the FFMs will also record local ecological, socio-economic and policy variables which are relevant to the intellectual property needs and expectations of TK holders.

Participatory observation will be conducted during village council meetings, staff meetings of research institutions as well as their field work, community gatherings, etc., as proposed by the local contact person(s) and as approved by the informants. In the semi-structured approach to data collection which the FFMs employ, the interview questions of the researcher are not fixed in advance (as they would be in the case of a fully structured approach). Rather they emerge flexibly from the preceding answer of the informant. Nevertheless, two 'interview threads' surrounding two clusters of questions will guide the interviews. It is to be emphasized that these clusters identify the *issues* to be researched in the FFMs, not the literal questions that will be posed to the informants. The literal questions will be adjusted to the specificity of each informant, his/her language and local context.

The first cluster focuses on needs, rights and expectations of TK-holders in relation to current approaches to their IPRs. This cluster includes, but is not limited to, such issues as: What does the informant know about the current IPR system? Where does the current IPR system meet the informant's needs and expectations with regard to TK? Does the current IPR system encourage or otherwise affect innovations embodying the community's traditional lifestyles? Where does the current IPR system not meet the needs and expectations of the informant with regard to TK? Do other currently existing legal instruments relate to the IPR needs or expectations of the informant with regard to TK?

The second cluster focuses on needs, rights and expectations in relation to future possibilities for the protection of IPRs of TK-holders. This cluster includes, but is not limited to, such issues as: what other forms of protection does the informant expect would meet the needs of TK-holders? How does the informant classify and distinguish different bodies of TK, for which he expects or needs IPR protection? Which of these bodies of TK, as classified and described by the informant, constitute possible subject matter for protection under the existing IPR system? What kinds of IPR acquisition procedures and registration systems would meet the informant's needs and expectations?

The information gathered through these data collection-methods will be analyzed and synthesized following each FFM and an interim mission report will be compiled. The interim mission reports of all FFMs to the selected regions will be compiled and will provide the information basis on which solid data-analysis and -synthesis for final output of the Main Activity can be conducted. Conclusions drawn from the final data-synthesis will constitute the final report of the Activity. The report, including method, data and findings will be published and disseminated as a WIPO publication.

Output

The expected output of the FFMs will be the identification of the needs of the holders of traditional knowledge for intellectual property protection.

The FFMs form the preparatory work of Main Activity 2 under Subprogram 11.1, to "study current approaches to, and future possibilities for, the protection of intellectual property rights of holders of indigenous knowledge, innovations and culture." The compiled data will provide a solid information base, which will enable:

- provision of input to other Main Programs of WIPO, enabling them to expand their activities to traditional knowledge, if substantial intellectual property needs of TK-holders are identified by the FFMs;
- a publication on current approaches to, and future possibilities for, the protection of intellectual property rights of holders of TK;
- informed and enhanced international cooperation by WIPO to promote the intellectual property protection in relation to such groups, as consistent with other international undertakings in this field, notably Agenda 21 (Chapter 26) and the Convention on Biological Diversity (Art.8(j));
- facilitation of an exchange of views among policy makers and local communities concerning more effective application of the intellectual property system to protect traditional knowledge.

ANNEX 3

WIPO FFMs

Table of Countries Visited

Fact Finding Mission	Country	Venues
South Pacific	Australia	Darwin, Sydney
June 15-26, 1998	New Zealand	Wellington, Rotorua, Auckland
	Fiji	Suva
	Papua New Guinea	Port Moresby
Southern and Eastern Africa	Uganda	Kampala, Mpigi
Sept. 4-20, 1998	Tanzania	Dar-Es-Salaam, Arusha, Narrokkawo
	Namibia	Windhoek, Gobabis
	South Africa	Pretoria, Cape Town, Upington
South Asia	Sri Lanka	Colombo
Sept. 28-Oct. 14, 1998	India	Chennai, Bangalore, Mumbai, Ahmedabad, New Delhi, Lucknow
	Bangladesh	Dhaka
North America	United States of America	Minneapolis, San Francisco, Seattle
Nov. 16-30, 1998	Canada	Vancouver, Calgary, Saskatoon, Ottawa, Iqualuit, Montreal
Central America	Guatemala	Tecpán, Ciudad de Guatemala,
Jan. 17-22, 1999	Panamá	Ciudad de Panamá, Madugandí
West Africa	Nigeria	Lagos, Abuja, Abeokuta
Jan. 18-Feb. 2, 1999	Ghana	Accra, Agogo
	Mali	Bamako
	Sénégal	Dakar, Rufisque, Fatik
Arab Countries	Oman	Muscat, Barka
Feb. 27-Mar. 13, 1999	Qatar	Doha
	Egypt	Cairo
	Tunisia	Tunis
Caribbean	Trinidad and Tobago	Port of Spain, Moruga, Siparia, Arima
May 30-June 9, 1999	Guyana	Georgetown
	Jamaica	Kingston, Accompong
South America		
Peru: May 10-13, 1999	Peru	Lima
Bolivia:November 17-19, 1999	Bolivia	La Paz, Tiawamaku
Totals: 9 missions	**28 Countries**	**60 Venues**

ANNEX 4

WIPO Interim Mission Reports

Fact-Finding Missions on Traditional Knowledge, Innovations and Culture (1998-1999)

Introduction

During 1998 and 1999, the World Intellectual Property Organization (WIPO) conducted nine fact-finding missions on traditional knowledge, innovations and culture (FFMs).

The missions were conducted under sub-program 11.1 of the WIPO Program and Budget for the 1998-1999 biennium, "to identify and explore the intellectual property needs and expectations of new beneficiaries, including the holders of indigenous knowledge and innovations, in order to promote the contribution of the intellectual property system to their social, cultural and economic development." The sub-program provides *inter alia* for the "study of current approaches to, and future possibilities for, the protection of intellectual property rights of holders of indigenous knowledge, innovations and culture, through fact-finding missions to North America, South and Central America, the South Pacific, West and Southern Africa, and South Asia, and publication and dissemination of information compiled from these missions."

FFMs were conducted in the following regions: South Pacific; Southern and Eastern Africa; South Asia; North America; Central America; West Africa; the Arab Countries; South America; and, the Caribbean.

After each mission, WIPO published a factual account of the activities it undertook during the mission in the form of an "Interim Mission Report" (IMR). The IMRs were disseminated to all persons and entities with whom the WIPO delegation met during the respective missions. Copies of the reports were also made widely available to Government representatives of the member states of WIPO, indigenous and local communities, organizations and individuals in other regions and were also published on WIPO's web site at <www.wipo.int/traditionalknowledge>

This Annex contains each of the IMRs.

Fact-Finding Mission 1

South Pacific
June 15 to 26, 1998

The mission was conducted by Messrs. Richard Owens, Director, and Wend Wendland, Senior Legal Officer, Global Intellectual Property Issues Division of WIPO

Australia (June 15 to 18, 1998)

WIPO's meetings and activities in Australia were facilitated and coordinated by the Department of Foreign Affairs and Trade (DFAT) of the Australian Government, principally by Mr. Antony Taubman and Mr. David Livingstone. WIPO also identified indigenous persons and their representatives, and other resource persons, with whom meetings were arranged by DFAT. Mr. Taubman accompanied the WIPO representatives throughout their stay in Australia and was present at all of their meetings and activities.

Darwin

On **Monday, June 15,** WIPO hosted a Roundtable to which representatives of indigenous communities and local communities, non-governmental organizations and interested academics were invited. Apart from Mr. Taubman, present were Ms. Susan Farquhar, Director, External Relations; Ms. Judy Barrett, Assistant Director Development & Legislation, of IP Australia; Mr. Stephen Gray, Northern Territory University Law Faculty; Mr. Mike Hill, Lake Jasper Project; Messrs. Kevin Banbury, Danny Edgar, Darren Godwell and Leon Morris of the Centre for Indigenous Resource Management; Dr. Marcia Langton, Northern Territory University; and, Mr. Chips Mackinolty of the Jawoyn People. Discussions centered on, amongst other topics, the use of certification and collective marks to protect arts, crafts and other traditional knowledge products; the Mabo and Wik decisions; initiatives to mediate between Western and traditional medicine; access to and benefit-sharing in respect of plant and other genetic resources; the relevance of Australian land legislation, the Land Councils and so-called "land management agreements" for the protection of traditional knowledge; the need for WIPO and others to raise awareness concerning the protection of traditional knowledge; and possible amendments to the Aboriginal and Torres Strait Islander Heritage Protection Act, 1984.

On **Tuesday, June 16,** the WIPO delegation visited the art center of the Munupi Arts and Crafts Association on Melville Island, just off the coast of Darwin. At this center, Tiwi artists (the Tiwi are a clan of Aboriginals) draw their inspiration from the rich Tiwi cultural heritage and create internationally renowned paintings, prints, pottery, carvings and fabrics. The artists voiced their concerns and wishes regarding protection of their arts and crafts, ceremonies, the name "Tiwi", and their agricultural, medicinal and environmental knowledge of the flora and fauna on their island. The Munupi Arts and Crafts Association has been leading an initiative to develop an "authentication mark" for use by all the Tiwi arts and crafts centers on Melville Island and neighboring Bathurst Island.

In Darwin, the delegation met with Ms. Margie West, Curator of the Aboriginal art collection of the Museum and Art Gallery of the Northern Territory. The Museum holds a significant Aboriginal art collection, in relation to which it is grappling with several copyright, documentation and cultural questions. Ms. West advised that the Fine Arts School at the Northern Territory University in Darwin, Australia had embarked on a pilot project to digitize Aboriginal and Torres Strait Islander art works held by it and other institutions, such as the Museum and Art Gallery of the Northern Territory. The project intends to place these digitized works online, in a secure Intranet environment, in order to document the artworks, facilitate their repatriation to the Aboriginal communities from which they originate and disseminate them to other Aboriginal communities.

The WIPO delegation met next with Mr. Peter Cooke, Caring for Country Executive Officer, and Mr. Greg Carter, Legal Advisor, of the Northern Land Council (which represents the rights and interests of Aboriginals under the Land Rights Act (Northern Territory), 1980 in the northern part of the Northern Territory, including Darwin). The following issues were discussed: ownership of and access to genetic resources under the Land Rights Act referred to above; use of the *droit de suite* (resale royalty) in respect of Aboriginal artworks; and the possible role and responsibilities of art dealers in protecting traditional art.

Sydney

On **Wednesday, June 17,** in Sydney, the WIPO representatives held a series of meetings with non-governmental organizations representing the interests of Aboriginal people, academics and private practitioners actively engaged in indigenous rights advocacy.

Specifically, meetings were held with Messrs. Geoffrey Atkinson and John Lesley of the National Aboriginal and Islanders Legal Services Secretariat (NAILLS); Ms. Alexander Styr-Sylvester, an academic engaged in heritage and cultural work for UNESCO; Dr. Gwenda Davey, the Coordinator of Folklife Studies at the National Center for Australian Studies at Monash University, Victoria; and, Dr. Vivien Johnson, Associate Professor of Sociology, Macquarie University, New South Wales. Dr. Davey raised with WIPO the importance of documenting and recording folkloric works, and the possible use of a *domaine public payant* system to obtain fair compensation for use of indigenous works. Dr. Johnson is studying ways in which to apprehend persons engaged in the piracy of Aboriginal art (she described her "copyright detective" program), and has developed impressive written and multi-media products.

The WIPO representatives then met with Ms. Terri Janke, Solicitor, Michael Frankel and Company Solicitors, Ms. Libby Baulch of the Australian Copyright Council and Ms. Caroline Morgan of the Copyright Agency Limited. Ms. Janke is the author of a study, commissioned by the Aboriginal and Torres Strait Islander Commission, on the cultural and intellectual property of Aboriginal people in Australia.

On **Thursday, June 18,** WIPO hosted a Roundtable, which was attended by indigenous persons, academics, a private legal practitioner and, as observers, representatives of IP Australia and the office of the Attorney General. The attendees included Dr. Joanna Sutherland, Faculty of Law, Australian National University; Mr. John Heath, Regional Aboriginal Coordinator, Hunter Institute of Technology; Dr. Peter Drahos, Law Program, Australian National University; Mrs. Alexandra Styr-Sylvester, UNESCO Consultant; Professor Kamal Puri, University of Queensland; Dr. Gwenda Davey, the Coordinator of Folklife Studies, National Center for Australian Studies, Monash University; Mr. Dean Ellinson, Clayton Utz Attorneys; Ms. Jacqueline Barrett, Attorney-General's Office; Ms. Vivienne Thom, IP Australia; and, Ms. Mary Graham, Foundation for Aboriginal and Islander Research Action. Topics raised during the Roundtable included: the Human Genome Diversity Project; access to and benefit-sharing in plant genetic resources; the protection of "folklore"; the recognition and use of customary law; the need for WIPO and others to raise awareness of the IPR system in relation to the protection of traditional knowledge; the protection of traditional foods; IPR laws in Islamic countries; the Hindmarsh Land case; the appropriation of Aboriginal "styles" by non-Aboriginals; the use of certification and collective trade marks; and arguments for and against the documentation of traditional knowledge.

The WIPO delegation's final meeting in Sydney was with Mr. Michael Fraser, Executive Director, Copyright Agency Limited.

New Zealand (June 19 to 22, 1998)

The delegation's meetings and activities in New Zealand were arranged and facilitated by Te Puni Kokiri, the Ministry of Maori Development, particularly by Ms. Aroha Mead.

WIPO learned that the discourse in New Zealand concerning Maori rights is framed largely by claims under the Treaty of Waitangi being heard by the Waitangi Tribunal. This treaty, signed in 1840 by representatives of the British Crown and of Maori, provides for *inter alia* the full exclusive and undisturbed possession by Maori of "all their treasures or treasured possessions" ("taonga"). Maori believe that the New Zealand Government has not honored all treaty obligations, and in 1975, the Waitangi Tribunal was established to hear claims under the treaty. One such claim, launched in 1991, relates to the ownership and control of Maori knowledge, traditions, culture, flora and fauna. This is the 262nd claim brought by Maori under the treaty and is hence colloquially referred to as "Wai 262."

Wellington

On **Friday, June 19,** the WIPO delegation met with representatives of the following units within the Ministry of Maori Development: Waitangi Treaty Compliance, Indigenous and Cultural Affairs, Economic Development, Monitoring and Legal and Law Reform. The WIPO representatives were given an overview of issues for Maori and the Government regarding protection and promotion of traditional knowledge, particularly in relation to Wai 262. Discussions also dealt with the use of Maori symbols in tourism and cultural affairs and the use of certification and trade marks.

Meetings were also held with representatives of other relevant Crown (New Zealand Government) Ministries and offices, namely the Ministry of Commerce, the Office of Treaty Settlements, Creative New Zealand, the Crown Law Office, the Ministry of Foreign Affairs and Trade, the Office of the Prime Minister and the Ministry of Cultural Affairs. In this meeting, discussions took place on access to natural resources used for making art works and musical instruments, the use of certification and trade marks, the repatriation of Maori cultural objects from overseas, the rights in sensitive information supplied by Maori to the Government, the possibility of requiring "prior informed consent" when trade mark or patent applications are filed using Maori names, knowledge or resources, and use by indigenous groups of moral rights protection under copyright law.

The next meeting was with Mr. Maui Solomon, a legal representative for several of the claimants in the Wai 262 claim, together with four of the Maori claimants, who had traveled some distance to be present. They included Ms. Del Wihongi, Mr. Martin Dawson, Mr. Leo Watson and Mr. Te Pere Curtis. Ms. Aroha Mead of the Ministry of Maori Development was also present. The primary focus of the meeting was the Wai 262 claim.

On **Saturday, June 20,** the WIPO delegation attended an all day meeting (a "hui") at the new national museum, Te Papa Tongarewa, on the repatriation of Maori ancestral remains and Taonga Maori (Maori "treasures", meaning cultural and other properties). The meeting was attended by senior Maori leaders, academics and museum curators and other officials, and began with a traditional welcoming ceremony. This meeting was a valuable opportunity for WIPO to witness how Maori consult among themselves on important policy questions. In addition, discussion took place on the right of non-Maori to use information obtained from studying Maori human remains.

Rotorua

On **Sunday, June 21,** at Rotorua, the WIPO delegation attended a Maori Writers Workshop where the principal topic of discussion was the planned publication in the year 2000 of a two volume book in the Maori language. The volume will contain fictional and non-fictional writings about Maori history, culture, knowledge and society, for the purpose of promoting and preserving Maori language and culture. The WIPO delegation took part in a discussion on the protection of Maori intellectual and cultural property.

241

After the workshop, the WIPO representatives visited a traditional Maori meeting hall with Ms. Maria Te Aranga Tini, from the Rotorua office of the Ministry of Maori Development. During this visit, Ms. Te Aranga Tini explained that she and the rest of her family were working closely with the Medical Faculty of the University of Otago, Dunedin (South Island) to discover a treatment or cure for familial gastric cancer experienced not only in her immediate family but in her Maori clan. She explained that she and her extended Maori family (*whanau*) have entered into a legal partnership with the Cancer Genetics Research Team at the University of Otago to identify the relevant mutant gene, develop a test to identify carriers and screen, counsel and treat family members. The approximately 12 000 Maori involved in this project have provided the Research Team with relevant genealogical and medical information and have established a trust, the Kimihauora Trust. One aspect of the partnership between the Trust and the Research Team is that any patent rights obtained in respect of the processes for identifying the gene or testing carriers would be jointly owned. Any resultant financial benefits would go towards further research. The Kimihauora Trust receives extensive support and assistance from the New Zealand Gastroenterologists Association and the New Zealand Health Research Council.

Auckland

On **Monday, June 22,** a meeting was held with representatives of the Auckland office of the Ministry of Maori Development, including Ms. Liz Ngata, Ms. Aroha Riley, Ms. Moana Sinclair and Mr. Tony Sinclair. Discussion topics included the Wai 262 claim, access to and use of archival materials held by broadcasters and universities, and the importance of indigenous representation in international meetings.

Fiji (June 23 and 24, 1998)

The visit to Suva, Fiji was facilitated by the Secretariat of the South Pacific Forum, which arranged meetings principally with interested Government Departments. The WIPO delegation also arranged certain meetings with other parties.

On **Monday, June 23,** meetings were held with Mr. Narube, Ministry of Finance; Messrs. Vakabu, Ulitu and Gokanasisa, the Ministry of Agriculture, Fisheries and Forests; Senator Korovulavula, the Fiji Performing Rights Association; Mr. Banuve, the Solicitor General's Office; Messrs. Rabuka, the Deputy Permanent Representative of Fiji to the United Nations in New York, and Koyamaibole, Ministry of Foreign Affairs; Mr. Nasome, the Department for the Environment; and, Ms. Kuridrani, the Department for Fijian Affairs.

Discussions at these meetings centered generally around a major concern for Fiji, namely access to plant and other genetic resources, particularly the kava (or "yagona") plant which has well-established medicinal and nutritional value. The Department for the Environment has also been at the forefront of drafting the "Sustainable Development Bill", which contains a chapter on access to genetic resources. The Bill has not yet been presented to the Parliament. Interest was expressed in WIPO's assistance in developing the legislation, and in holding a regional workshop on access to and benefit-sharing in relation to genetic resources. Also discussed was the protection of Fijian traditional music and musical instruments, the need for greater awareness-raising and training on the IPR system, and its potential uses in protecting traditional knowledge systems.

That evening, the WIPO representatives met with an organization of traditional women healers named "Wainimate", which is involved in several documentation, training and awareness-raising activities. It works closely with *inter alia* the World Wildlife Fund and the University of the South Pacific in Fiji.

On **Wednesday, June 24,** meetings were held with Mr. Joe Nawalowalo, the National Kava Council of Fiji, Mr. Lopeti Senituli of the Pacific Concerns Resource Center, Professor Bill Aalbersberg, the University of the South Pacific and representatives of the South Pacific Commission and the Forum Secretariat. The 1999 review of Article 27.3 (b) of the TRIPS Agreement, material transfer agreements and plant breeders' rights were among the issues discussed.

Papua New Guinea (June 26, 1998)

As with Fiji, the South Pacific Forum Secretariat facilitated the WIPO delegation's meetings in Port Moresby, Papua New Guinea (PNG).

On **Friday, June 26,** WIPO met with Messrs. Theo Yasuase of the Ministry of Foreign Affairs and Mr. Gai Araga, the Registrar of Trade Marks. Interest was expressed in obtaining WIPO's assistance in drafting appropriate legislation concerning traditional knowledge and access to genetic resources, as part of the country's current legislative program to implement the TRIPS Agreement. As with Fiji, access to genetic resources was the uppermost concern for PNG officials. Also discussed was a recent and much publicized case involving the commercial use of human genetic material obtained from a member of the Hagahai people on the island. Interest was also expressed in organizing a regional workshop on traditional knowledge protection, and access to and benefit-sharing in genetic resources.

The WIPO representatives subsequently met with Dr. Jacob Simet, the Executive Director of the National Culture Commission, which develops and promotes traditional and contemporary performing arts in PNG.

A meeting also took place with Mr. Leonard Louma, the Deputy Secretary (Policy) of the Department of Foreign Affairs. Messrs. Yasuase and Araga were also present.

In addition, the WIPO delegation obtained information by telephone from other relevant institutions in PNG such as the Forestry Faculty of the University of Technology in Lae, Melanesian Environmental Concern and the Medical Research Institute.

Fact-Finding Mission 2

Southern and Eastern Africa
September 4 to 20, 1998

The mission was conducted by Miss Faith Odibo, Senior Program Officer and Mr. Wend Wendland, Senior Legal Officer, of the Global Intellectual Property Issues Division of WIPO.

Uganda (September 4 to 8, 1998)

WIPO's meetings and activities in Uganda were facilitated and coordinated by the office of the Registrar General in the Ministry of Justice and Constitutional Affairs, principally by Mrs. Ruth Masika, Registrar and Mrs. Ketra Tukuratiire, Acting Assistant Registrar. WIPO also identified traditional knowledge holders and their representatives, and other resource persons, with whom meetings were arranged by the Registrar General's Department. The WIPO delegation was accompanied by a representative of the Registrar's department to most of the meetings.

Kampala

On **Friday, September 4,** the delegation attended two meetings at the Ministry of Justice and Constitutional Affairs. The purpose of the meetings was to provide some background on the objectives of the FFM and to obtain information as to the protection of traditional knowledge in the country. At the first meeting, the delegation met with legal officers in the Registrar's Department, namely, Mrs. Tukuratiire, and Messrs. Bisereko, Ojuko and Turyasingura. The second meeting was with the Minister of Justice and Constitutional Affairs, Honorable J.S. Mayanja Nkangi.

That afternoon, the delegation attended a meeting with representatives of the National Theatre and Cultural Center, including Messrs. Fred Waswa, Jackson Ndawula and Dr. Albert Ssempeke. The discussions focussed on the fact that most traditional works, particularly musical works, are derived from oral tradition and have therefore not been reduced to any tangible form. The need for documentation, sensitization in respect of the value of traditional knowledge and advice on legislation to protect such knowledge was highlighted.

The delegation next met with Dr. Rutiba of the Department of Religious Studies at the Makerere University. Dr. Rutiba was involved in the drafting of Article 8(j) of the Convention on Biological Diversity, 1992 and has participated in several international and regional events concerning traditional knowledge, healing, theology and biodiversity. In his view, there is a negative perception of traditional knowledge and practices, which are regarded by some as "old fashioned" and "non-western". He sees the intellectual property system (the IP system) playing an important role in the protection of knowledge systems, and suggested that WIPO could provide advice on the use of the IP system to a broad range of holders of such knowledge who are being widely exploited. He also identified documentation as a critical first step in moving towards protection of this knowledge.

On **Saturday, September 5,** the delegation attended a meeting with 13 traditional healers, convened by Dr. Donna Kabatesi, Director of "Traditional and Modern Health Practitioners Together Against Aids" (THETA), an indigenous NGO working with traditional healers and conventional health practitioners in the fight against AIDS and other diseases. Dr. Kabatesi herself practices conventional western medicine and is a qualified traditional healer. She kindly assisted with the interpretation during the meeting. The traditional healers expressed concerns that the traditional knowledge on which their healing practices are based was being eroded due to the

244

negative image attached to it. The role of intellectual property protection, the pharmaceutical industry, bioprospecting and the documentation of traditional knowledge, were topics raised by the healers.

That afternoon, the delegation met with Mr. Christopher Kizza Makumbi, an ethnomusicologist specializing in African music and dance, and the head of The Institute for Traditional Music and Arts, affiliated with the Makerere University. He emphasized the need to promote the use of African folksongs and traditional musical instruments, which are fast being replaced by modern popular music and instruments. He regretted the loss of the informal education process, which transfers beliefs and traditions from generation to generation, and which teaches the "real" use of music and dance as a means of transmitting knowledge and information, and not just for entertainment. Mr. Makumbi and two of his colleagues gave the delegation a presentation of folksongs and demonstrated the use of traditional musical instruments.

The WIPO delegation then met with Mr. Babuuzibwa Mukasa Luutu, a lawyer involved in traditional knowledge practices from the Buganda region. Mr. Luutu runs *inter alia* the Research and Development Network (REDNET), which brings together peasant farmers and healers, for the promotion of cultural and biological diversity. He is closely involved in primary health care and food security issues.

On **Sunday, September 6,** the delegation met with several former and current writers, dancers and singers, including Professor Servanda Moses, Mr. Joseph Warugembe and Mr. Steven Rwangyezi, the founder and Director of the Ndere Dance Troupe and a member of the Board of Trustees of the National Theatre and Cultural Center.

Thereafter, the delegation met with 40 representatives of the Ugandan Herbalist and Cultural Association, which comprises healers and herbalists from all over Uganda, who work in close cooperation with THETA and some modern practitioners. The prevention and cure of AIDS was once again a primary concern. The meeting took place at the Association's clinic on the outskirts of Kampala, and was preceded by welcoming statements and music from healers, as well as patients. Haji Lutakome Sentomme, the president of this Association, expressed concern about the exploitation of their traditional knowledge and practices in the treatment of illnesses and administration of primary health care, without any acknowledgement of the sources and any sharing in the benefits.

Following this meeting, the delegation visited the Mpigi Health Project, approximately 50 kilometers from Kampala, at Kabasanda in the Mpigi District. There, they were warmly received by a gathering of about 80 practitioners, herbalists and birth attendants, and were taken on a tour of a herbal medicinal garden and a traditional birthing clinic.

On **Monday, September 7,** the WIPO representatives returned to the Makerere University, where they met with Dr. Oryem-Origa and Mr. John Tabuti of the Department of Botany. Dr. Oryem-Origa and Mr. Tabuti are involved in international and regional initiatives regarding the conservation of ethnobotanical resources and traditional knowledge (such as the African Network of Ethnobotanists), traditional knowledge documentation projects in Western Uganda, and they participated in a recent bioprospecting workshop held in Uganda.

The meeting focussed on the need to carry out more research on the ethnobotanical resources of the country, regulation of the access to biological resources, bioprospecting and the need to develop a framework for the protection of traditional knowledge.

The next meeting was with Mr. Ephraim Kamuhangire, Director of the National Museum of Uganda, who provided information on the protection of culture, heritage and language in Uganda.

This was followed by a meeting with Professor B. H. Ogwang, Natural Resource Management Specialist (Biodiversity and Range Ecology), of the National Environment Management Authority, which is responsible for developing government policies on access to genetic and biological resources. The discussion focussed on the need to develop regulations governing bioprospecting and a framework for adequate protection of intellectual property rights.

The delegation next met with the Commissioner of Culture in the Ministry of Gender, Labor and Social Development, Mr. Cornelius Owor.

WIPO's final meeting in Uganda was with Mr. Steven Rwangyezi, referred to above, who is the founder and Director of the Ndere Dance Troupe and a member of the Board of Trustees of the National Theatre and Cultural Center.

Tanzania (September 8 to 12, 1998)

The WIPO delegation's visit to Tanzania was organized with the assistance of Mr. Stephen Mtetewaunga, the Acting Registrar of Patents and Trade Marks, Ministry of Industry and Commerce, with the support of Mrs. Leonillah Kishebuka, Principal Assistant Registrar.

WIPO also received valuable assistance from Mr. Godwin Ole Kambainei and Mr. Peter Toima, both of whom are referred to further below, as well as the Indigenous Peoples of Africa Coordinating Committee (IPACC), with establishing valuable contacts and the organization of several meetings.

Dar-Es-Salaam

On **Tuesday, September 8,** the WIPO delegation met, at the Ministry of Industry and Commerce, with Mr. Mtetewaunga, Mrs. Kishebuka, Mr. Challi, Secretary General of the National Arts Council, Dr. Kayombo, the Director General of the National Museums of Tanzania, and Mr. Masembei of the Ministry of Education and Culture. The delegation learnt much about current developments in Tanzania concerning cultural policies, intellectual property, repatriation of human remains, and education. There was a particularly interesting discussion on what constitutes "folklore." The participants at the meeting raised *inter alia* the need for documentation of traditional knowledge and for a mechanism for the protection and collective management of rights in traditional and "folkloric" works, which are largely communally held.

That evening, the WIPO delegation met with Mr. and Mrs. Ole Kambainei, both of the Maasai tribe. Mrs. Kambainei is also a member of Ndasati é Maa ("Women of Maa"), a non-governmental organization established for Maasai women or women married to Maasai. The discussion highlighted that the Maasai, who are predominantly pastoralist farmers, are the holders and custodians of valuable knowledge systems; and in the face of rapid knowledge and language loss, the urgent need to record and document Maasai history, culture, life practices and language. The fact that emphasis on tribal identities is discouraged in Tanzania was also central to the discussion.

On **Wednesday, September 9,** WIPO met with Professor Rogasian Mahunnah, Director of the Institute of Traditional Medicine at the Muhimbili University College of Health Sciences, which is attached to the University of Dar-Es-Salaam. Professor Mahunnah is a botanist and has worked with traditional healers for over 30 years. He is a member of a medicinal plants sub-committee of the Scientific, Technical and Research Commission of the Organization of African Unity (OAU) and of the Plant Genetic Resources Center in Arusha, Tanzania. Professor Mahunnah and the WIPO representatives held an interesting discussion on *inter alia* access to biological resources and associated knowledge and the need for awareness-raising and training amongst traditional knowledge holders (including in respect of negotiation and licensing skills).

The WIPO delegation was then taken on a tour of the National Museum of Tanzania by it's Director, Dr. Kayombo, where they were shown several valuable artifacts. Dr. Kayombo also explained the museum's attempts to retrieve valuable cultural heritage works of Tanzanian origin which are held in other countries.

The WIPO delegation traveled to Arusha that evening, and met with Mr. Godwin Ole Kambainei, who had provided them with much assistance in arranging the meetings that would take place the following day.

Arusha

On **Thursday, September 10,** the delegation met separately with representatives of several NGO's in Arusha, including Mr. Peter Toima, the Executive Secretary of the Maa Pastoralist Development Organization, Mrs. Anna Gabba of Canadian Universities Services Overseas (CUSO), and Messrs. Greg Cameron and Edwin Karea of Pastoralist Indigenous NGO's (PINGO's). These organizations are involved in developmental programs for capacity building within Maasai and other communities. Interesting views were exchanged and useful contacts made.

Mr. Toima, who is himself a Maasai, and who wrote on traditional knowledge for his MA degree, made arrangements for the visit by the WIPO representatives to his village on the following day.

Narrokkawo, Simanjiro District

Early on **Friday** morning, **September 11,** the delegation traveled by road to Narrokkawo, a rural and traditional Maasai village in the Simanjiro District, about 5 hours from Arusha. The WIPO representatives were invited by the village elders to participate in and address a meeting of 32 representatives of the village. The meeting provided a good opportunity for the delegation to learn first hand of the needs, expectations and experiences of such a community. There was little appreciation among the community of the powers of modern technology, particularly medical- and biotechnologies, to develop modern pharmaceutical products derived from or with the assistance of traditional knowledge. Mr. Toima was present at the meeting and assisted with interpretation.

Namibia (September 13 to 16, 1998)

The WIPO delegation's meetings in Namibia were organized with the assistance of Mr. Edward Kamboua, Deputy Director in the Registrar's Department of the Ministry of Trade and Industry; Mr. Tarah Shinavene, Director of Copyright Services, Ministry of Information and Broadcasting; Mr. Moses M. Moses, Executive Director of the Namibian Society of Composers and Authors of Music (NASCAM); Mr. Sem Shikongo of the Ministry of Environment and Tourism and Mr. Axel Thoma, Coordinator of the Working Group of Indigenous Minorities in Southern Africa (WIMSA). Mr. Moses accompanied the delegation to most of the meetings.

Windhoek

On **Sunday, September 13,** the delegation met with Mr. Moses, Mrs. Annaleen Eins, Curator of the National Gallery of Namibia and Mr. André Strauss, Cultural Officer, Ministry of Basic Education and Culture. The WIPO representatives were given a detailed overview of cultural heritage and related issues in Namibia.

On **Monday, September 14,** the delegation participated in a roundtable hosted by WIMSA and attended by representatives of institutions and NGO's active in the protection of indigenous peoples' rights, land rights, human rights, the environment, conservation and sustainable development, namely: Mr. Garth Owen Smith and Ms. Margaret Jacobson of the Integrated Rural Development and Nature Conservation Organization (IRDNC); Ms. Helen Shino of the Namibian Non-Governmental Organization Forum (NANGOF), an umbrella organization for NGO's in Namibia; Messrs. James Leith and Cyril Lombard of CRIAA-Southern Africa Development and Consulting (CRIAA SA-DC); Mr. Patrick Klintenberg of the Desert Research Foundation; Mr. Andrew Corbett of the Legal Assistance Center; Ms. Sophie Simmonds of Inter Consult and Mr. Axel Thoma of WIMSA. The roundtable explored issues such as: the links between land rights and rights to knowledge; access and benefit-sharing in respect of biological resources; the appropriate definition and scope of the rights that are sought to be protected, the possible use of "soft law" modalities to protect these rights; and, the need for basic awareness-raising on the tools available for protection of rights and interests in traditional knowledge.

Following this meeting, Mr. Thoma introduced the delegation to Mr. Raymond Martin, a Swiss volunteer working with the San (an indigenous group, living mainly in the desert areas of Namibia and South Africa, and also known by some as "bushmen") in the Omaheke Region, east of Windhoek, to plan a visit to that region for the next day.

That afternoon, the delegation participated in another roundtable, hosted by the National Biodiversity Task Force of the Directorate of Environment Affairs, Ministry of Environment and Tourism. The National Biodiversity Task Force is responsible for the implementation of a "National Biodiversity Program", and it comprises working groups on, *inter alia*, traditional knowledge, biotrade, biotechnology, forest biodiversity and agricultural biodiversity. The roundtable was attended by government representatives, academics, representatives of NGO's and traditional healers, most of whom are members of one or more of the working groups referred to. The participants included: Mr. Sem Shikongo and Dr. Phoebe Barnard of the Directorate of Environment Affairs; Dr. Martha Kandawa-Schulz, Department of Chemistry, University of Namibia; Mr. Alphonse Msimane and Mr. Mutjinde Katjiua of the University of Namibia; Mr. Chris Brown of the Namibian Nature Foundation; Ms. Pauline Sekgonyana, a traditional healer; Mr. Adolf de Klerk of Agrifutura; Mr. Cyril Lombard of CRIAA; and Ms. Lorraine Witschas, a herbalist and masseuse. The roundtable covered topics such as: the need for equitable policies and legislation on bioprospecting and related intellectual property issues; the clarification by the delegation of the respective roles and responsibilities of WIPO and the World Trade Organization (WTO), including in respect of the implementation of the TRIPS Agreement; the relationship between the TRIPS Agreement and the Convention on Biological Diversity; and, the suitability or otherwise of the intellectual property system for the protection of traditional knowledge systems.

Gobabis, Omaheke Region

On **Tuesday, September 15,** the delegation met with Mr. Paolo Thataone, the Governor of the Omaheke Region, which lies approximately a 2 hour drive to the east of Windhoek. The main center in the region is the town of Gobabis. The WIPO representatives were given a very useful overview of the communities, such as the San, Herero, Damara, and Tswana groups, that inhabit this region and the problems and issues that they face.

Following this meeting, the delegation met with Mr. Raymond Martin, referred to above, who had organized the meeting and visits with representatives of San communities in Gobabis and surrounding areas.

The delegation first met with a San couple at Mr. Martin's home, who gave the WIPO representatives a first-hand and tangible feel for the range of issues faced by the San.

Thereafter, the delegation was taken to Drimiopsis, a Government settlement for San, Nama and Damara people outside Gobabis. They met informally with several families and individuals. Their visit to this region ended with a call on a primary school for San children, run by Mr. Martin's wife, Ms. Marie-Claude Martin.

On **Wednesday, September 16,** and just before departing from Namibia, the delegation had its final meeting with Mr. Johannes Hoeseb, an officer of the Ministry of Basic Education and Culture, in Windhoek.

South Africa (September 16 to 18, 1998)

The meetings in South Africa were organized and coordinated with the assistance of Mr. MacDonald Netshitenzhe, the Registrar of Patents, Trade Marks, Designs and Copyright, and Ms. Busi Ndimande, of the Department of Trade and Industry; Dr. Lynda Gillfillan, Program Coordinator, Indigenous Knowledge Systems Program; Mr. Nigel Crawhall of the Indigenous Peoples of Africa Coordinating Committee (IPACC); and, Mr. Geoff Perrot of the South African San Institute (SASI).

Pretoria

On **Wednesday, September 16,** the delegation met with Mrs. Elsa Dry, Director, Department of Foreign Affairs, and provided her with an overview of the purpose and scope of the fact-finding mission. Mrs. Dry advised the WIPO representatives of several other resource persons with whom they could usefully meet.

On **Thursday, September 17,** the delegation participated in a roundtable hosted by the office of the Registrar of Patents, Trade Marks, Designs and Copyright, and attended by representatives of Government Departments and agencies. The participants included: Mr. Steven Sack of the Department of Arts and Culture; Mr. Mogege Mosimege, Manager, Indigenous Technologies Audit and Tertiary Initiatives of the Council for Scientific and Industrial Research (CSIR) and a member of the National Steering Committee of the Indigenous Knowledge Systems Program; Dr. Roger Ellis of the Plant Genetic Resources Unit of the Agricultural Research Center; and, Mr. Thokozani Simelare of the National Parks Board. The Registrar's office was represented by Ms. Ndimande, Mrs. Kathleen Airey and Mr. Mpho Mashego. The parties held an interesting and wide ranging discussion on questions of culture and the cultural industries, plant and other genetic resources, plant breeder's rights, biodiversity (including a White Paper on this subject issued by the Government in July, 1997), the role of intellectual property, the role of the Science Councils in South Africa, the Indigenous Knowledge Systems Program (a program to valorize and protect indigenous knowledge and technologies being conducted under the leadership of Dr. Mongane Wally Serote, MP), the need for documentation and awareness-raising, and the protection of "folklore."

Cape Town

On **Friday, September 18,** the delegation had a breakfast meeting with Mr. Geoff Perrot of the South African San Institute (SASI), who had helped with the planning of a visit to a San community living just outside the town of Upington, in the north-west of South Africa. SASI is an NGO actively involved in promoting and defending the rights and interests of the San people in Southern Africa, and works closely with WIMSA in Namibia, referred to above.

Later that morning, the delegation met with members of the Medical Research Council's Research Group for Traditional Medicine, run by the Universities of Cape Town and the Western Cape. This group conducts research into traditional medicinal knowledge, and aims to: provide a scientific infrastructure for the beneficial utilization of such knowledge in the interests of public health; establish mutual understanding between traditional and "conventional" healers and break down prejudices against traditional healing; provide a basis for recognition and protection of traditional healers; provide a database of traditional medicinal knowledge; and, to provide an intellectual "home" for young scientists. This enlightening meeting was attended by Dr. Peter Folb, Dr. Peter Smith, Mr. Motlalepula Matsabisa, Ms. Sibongile Pefile, Mr. Siyabulela Calvin Ntutela, of the Research Group, and Ms. Patricia Davison and Ms. Medée Rall of the South African Museum. The group works very closely with traditional healers and is looking towards receiving advice on and developing modalities to ensure that the traditional healers benefit from any innovations developed from their knowledge. Pivotal to these discussions was the issue of the management of communally-owned rights and the contribution the intellectual property system could make to their protection.

The delegation's final meeting in Cape Town took place at the Parliament of South Africa, and was organized by Dr. Lynda Gillfillan, Program Coordinator of the Indigenous Knowledge Systems Program. The meeting was attended by Dr. Gillfillan, Ms. Rachel Wynberg of Biowatch South Africa, Ms. Mapula Masemola of the State Law Advisor's office, and, Ms. Rosemary Wolson, Intellectual Property Manager at the University of Cape Town. Biowatch South Africa is an NGO working to monitor and research the implementation of the Convention on Biological Diversity and related international agreements in South Africa. Ms. Masemola is one of the draftpersons of the new draft "Protection and Promotion of South African Indigenous Knowledges Bill."

Ms. Wolson works in a newly-created department of the University of Cape Town, which is looking at ways of promoting cooperation between industry and academia in respect of the information and knowledge held by the University, including issues such as licensing, technology transfer, and intellectual property training. Mr. Enver Daniels, Chief State Law Adviser, also joined the meeting briefly.

The discussions at this meeting centered on the new Bill referred to above, the suitability or otherwise of intellectual property to protect traditional knowledge and, the relationship between the TRIPS Agreement and the Convention on Biological Diversity. In response to some comments from Ms. Wynberg, the WIPO team also provided information on the different roles of WIPO and the World Trade Organization (WTO) broadly, and specifically as regards the implementation of the WTO's TRIPS Agreement.

Upington

On **Saturday, September 19,** the delegation was in Upington, to meet with representatives of a San community living nearby. The meetings in Upington were facilitated with the valuable assistance of Mr. Nigel Crawhall, a Canadian linguist who works with the South African San Institute (SASI) and the Indigenous Peoples of Africa Coordinating Committee (IPACC).

The delegation first met with Mr. Petrus Vaalbooi, who is actively involved in the promotion of the history, language, tradition, culture and heritage of the San people. Mr. Vaalbooi attends United Nations meetings as a representative of the South African San community. The delegation learnt a lot about the San people and the issues which are important to them.

Following this meeting, and with the assistance of Mr. Crawhall, the WIPO delegation hosted a roundtable attended by approximately 16 San people drawn from the Upington area to discuss the protection of their languages, traditional knowledge, innovations and culture. Mr. Henry Esau, Assistant Director, Upington Region, Department of Arts and Culture, of the Government of the Northern Cape Province (in which Upington falls) also attended. The San spoke passionately of their wish to protect their dying languages and heritage, and to develop means of controlling access to their knowledge and of sharing in any benefits accrued from its use. One or two of the San participants were among the last surviving speakers of the N/u language of the Southern San Language family which Mr. Crawhall is and the community are documenting.

Following this meeting, and at the invitation of the participants, the WIPO representatives visited one of the communitites located in the Swartkop settlement outside Upington.

National Workshop on Indigenous Knowledge Systems, Mafikeng (September 21-23, 1998)

The fact-finding mission to South Africa culminated in the participation of WIPO in this workshop, at the invitation of Dr. Mongane Wally Serote, MP and Chairman of the Parliamentary Portfolio Committee on Arts, Culture, Languages, Science and Technology.

Dr. Serote is the Chairman of the National Steering Committee of the Indigenous Knowledge Systems Program in South Africa. The Committee organized this National Workshop to bring together all the stakeholders to discuss ways forward for the protection of indigenous knowledge and technologies in the country, as well as to share experiences in respect of the types of knowledge systems which exist in South Africa.

Miss Odibo and Mr. Wendland made presentations on WIPO and on the international intellectual property system.

Attendees at this meeting included academics, representatives of the Government, Science Councils and other research institutions, as well as traditional technologists, healers and other custodians of indigenous knowledge. Lively debate followed the presentations and these centered on the protection of communal rights, the use of the intellectual property system, as well as the new Bill referred to above.

Mr. Wendland and Miss Odibo attended the first day and a part of the second day of the meeting and left for Geneva on the night of September 22, 1998.

Fact-Finding Mission 3

South Asia
September 28 to October 14, 1998

The mission was conducted by Messrs. Richard Owens, Director, and Shakeel Bhatti, Program Officer, of the Global Intellectual Property Issues Division of WIPO.

Sri Lanka (September 28 to September 29, 1998)

WIPO's meetings and activities in Sri Lanka were kindly facilitated and coordinated by the National Office of Intellectual Property of the Sri Lanka Government, principally by Dr. D. M. Karunaratna, Director, National Office of Intellectual Property, Ministry of Internal and International Commerce and Food. WIPO also identified resource persons with whom meetings were arranged by the National Office of Intellectual Property. Dr. Karunaratna kindly accompanied the WIPO representatives throughout their stay in Sri Lanka and was present at all their meetings and activities.

Colombo

On **Monday, September 28,** the WIPO mission met with the Academy of Sri Lankan Culture. Apart from Dr. Karunaratna, the meeting was attended by Prof. C. Wikramagamage, Director General, Academy of Sri Lankan Culture; Prof. V. Vitarana, Dean, Faculty of Arts, University of Ruhuna; Dr. W. G. Weeraratna; Mr. V. Nanayakkara; Mr. H. K. Premadasa, Secretary, Arts Council, Ministry of Cultural and Religious Affairs; Mr. K. P. Nihalnanda, Justice of Peace and Chairman of the Sri Lanka Performing Rights Society; Prof. P. L. Prematilleke, Archeological Director, Alahanaparivena Project, Ministry of Cultural and Religious Affairs; Mr. K. Jayatilake, President, Arts Council of Sri Lanka. Discussions centered *inter alia* on intellectual property aspects of the documentation and preservation of expressions of folklore, such as folk songs, folktales, architectural forms, and ceremonial practices; the preservation of a collection of 42,000 Sri Lankan folksongs; the commercialization of traditional Sri Lankan music in relation to performers' rights; and the use of Ayurvedic medicine and its difference from indigenous traditional medicine.

On the same day, the mission met with the Environmental Foundation, Ltd., a national non-governmental organization (NGO) which has conducted studies on traditional ecological and biodiversity-related knowledge in Sri Lanka. Besides Dr. Karunaratna, the meeting was attended by Mr. R. Algama, Chairman; Mr. H. Withanage, Senior Environmental Scientist; and Mr. J. Annawardena, Law Officer of the Foundation. Discussions focused on a nation-wide project for the documentation of traditional ecological knowledge, including knowledge of medicinal plants, food varieties, taxonomic knowledge of plants and animals, and handicrafts. Finally, the mission held discussions at the Ministry of Health and Indigenous Medicine of Sri Lanka. The meeting was attended by Mr. Karunaratna; Mr. K. De Silva, Director, Medicinal Plants Conservation Project, Ministry of Health and Indigenous Medicine; and Mr. A. Nanayakkara, Attorney-at-Law. Discussions focused on intellectual property aspects of traditional medicine and on questions of documentation and disclosure in the context of the Medicinal Plants Conservation Project.

On **Tuesday, September 29,** the mission had a meeting at the Ministry of Cultural Affairs, including the Panel on Folklore of the Arts Council, the National Library and the Sri Lanka Book Development Council, which was attended by Dr. Karunaratna, Mr. S. G. Samarasinghi, Chairman, Folklore Panel, Arts Council of Sri Lanka; Mr. K. Jayatilleke, Chairman, Arts Council, Ministry of Cultural Affairs; Prof. A. V. Suraweera, Deputy Minister of Cultural Affairs; and Mr. B. Boteju, Director and Secretary, Sri Lanka Performing Rights Society.

Discussion focused on provisions for the protection of expressions of folklore in the national copyright law of Sri Lanka and needs for capacity building to document "traditional agricultural folklife."

In the afternoon the mission had a meeting at the Bandaranaike Memorial Ayurveda Research Institute which was attended by Mr. Karunaratna, Dr. U. Pilapituya, Director, and other staff members of the Bandaranaike Memorial Ayurveda Research Institute. The discussion focused on the need for documentation, recognition, protection, teaching and transmission of traditional medicinal knowledge from the Ayurvedic, Unani Tibb and Siddha traditions; the need for accurate intellectual property information and intellectual property training for traditional practitioners and Sri Lankan researchers working on Ayurvedic medicine; the need for clinical trials to be carried out with Ayurvedic medicine; and the need for legal advice and assistance on intellectual property to practitioners of, and researchers on, Ayurvedic medicine.

India (September 30 to October 6, 1998 and October 10 to 13, 1998)

Chennai

On **Wednesday, September 30,** the mission visited the M. S. Swaminathan Research Foundation (MSSRF), a non-profit Trust which was established in 1988 with the mission of harnessing science and technology for environmentally sustainable and socially equitable development. In the morning the mission met with Prof. M. S. Swaminathan, Chairman of MSSRF and visited the facilities of MSSRF, including the Molecular Biology, Tissue Culture and Microbiology Laboratories, the Technical Resource Center for the Implementation of the Equity Provisions of the Convention on Biological Diversity, and the Informatics Center and Electronic Library, including the Farmers' Rights Information System.

In the afternoon the mission attended a Consultation on intellectual property rights and traditional knowledge at the MSSRF, which was hosted by Prof. M. S. Swaminathan and was attended, *inter alia*, by Dr. V. Balaji, Regional Coordinator, Asian Ecotechnology Network, MSSRF; P. Balakrishna, Senior Scientist, Biodiversity and Biotechnology, MSSRF; Mr. A.V. Balasubramanian, Center for Indian Knowledge Systems; A. V. Ganesan, Former Secretary of Commerce to the Government of India; G. Natarajan, Agri-Horti Advisor, Greenthumb; Mr. S. Arunachalam, MSSRF; Mr. T. M. Mohan, Principle Scientific Officer, Department of Biotechnology; Mr. L. Kannan, PPST Foundation; Mr. V. A. Nambi, Research Scholar, Department of Futurology, Bharatuidasan University; Mr. R. J. R. Daniels, MSSRF; Mr. J. Vencatesan, MSSRF; Mr. R. Rajamani; Mr. R. Latha, MSSRF; Mr. A. Paride, MSSRF; Mr. M. Shanmugavelan, MSSRF; Mr. K. Balsubramania, MSSRF; Mr. Tramasatti, CERI; Ms. D. Thrayareja, Madras Craft Foundation; Mr. G. Rani, MSSRF; Mr. C. Manpula, Irula Tribal Women's Welfare Society; Dr. P. B. S. Kumal, B.S.M.S.; Mr. V. Paranthaman, Crafts Council of India; Mr. P. Cuari, Crafts Council of India; and Mr. P. Paranthaman, Honorary Secretary, Crafts Council of India. The topics of discussions included the relation between intellectual property rights and the conservation of biological diversity; the need for documentation of farmers' traditional knowledge; philosophical underpinnings underlying the international IPR system, such as certain concepts of property; IPRs and the conservation and use of plant genetic resources for food and agriculture; and the protection of local designs from unauthorized commercialization through the national textile industry.

Bangalore

On **Thursday, October 1,** the mission had discussions at the Indian Institute of Science with Prof. M. Gadgil, Astra Professor of Biological Sciences; Mr. Y. Gokhale; and Mr. U. Ghate, Center for Ecological Sciences, Indian Institute of Science, which covered intellectual property-related aspects of the creation of Peoples' Biodiversity Registers. In the afternoon the mission had a meeting at the Foundation for the Revitalization of Local Health Traditions (FRLHT) with Dr. D. Shankar, Director, Mr. M. A. Karew, and other staff members of the Foundation for the Revitalization of Local Health Traditions. Discussions focused on the intellectual property aspects of Ayurvedic and Siddha medicine; examples of innovations of traditional practitioners and bonesetters; the protection of traditional medicinal knowledge in tribal communities through cultural practices and informal intellectual property regimes.

On **Friday, October 2, 1998** the mission attended a Roundtable on intellectual property and traditional knowledge at the National Law School of India University, Bangalore. The Roundtable was hosted by Dr. N. L. Mitra, Director, National Law School of India University (NLSIU); chaired by Dr. Surendra, Associate Professor, NLSIU; and was attended, *inter alia*, by Prof. S. Dasgupta, Assistant Professor, NLSIU, M. K. Nawaz, Advocate, High Court of Karnataka; Prof. P. K. Mamidi, Economics and Social Science Area, Indian Institute of Management at Bangalore; Prof. R. S. Kulkarni, Head, Department of Genetics and Plant Breeding, University of Agricultural Sciences (UAS), Bangalore; Dr. S.N. Vajranabhdaiah, Department of Crop Physiology, UAS; Dr. K. N. Ganeshaiah, Department of Genetics and Plant Breeding UAS; Dr. K. S. Kulkarni, Professor and Head, Department of Genetics and Plant Breeding UAS; Mr. B. M. Kumaraswamy, Professor of Economics, D.V.S. College; Prof. C. J. Saldanha, St. Joseph's College; Mr. L. Surendra; Dr. K. Sitharaman, NLSIU; Mr. D. Shankar, Director, Foundation for Revitalisation of Local Health Tradition (FRLHT); Mr. M. A. Karew, FRLHT; Prof. M. L. Upadhayaya, NLSIU; Prof. M. Nawaz, NLSIU; Mr. K. V. L. Murthy, Co-ordinator for Technology, Institute of Wood Science; Mr. M. Gadgil, Centre for Ecological Sciences (CES), Indian Institute of Science; Mr. G. Utkarsh, CES, Indian Institute of Science; Prof. N.S. R. Murthy, NLSIU; Prof. B. Mathew, NLSIU; Dr. D. N. K. Sarma, Research and Development Centre; Mr. A. Ganguly, CES, Indian Institute of Science; Mr. S. Padmanabhan, CES, Indian Institute of Science; Mr. B.S. Ranganathe, Vivekananda College of Law; Mr. V.C. Vivekananda, Freelance Journalist; Mr. A. Kumarswamy, Civil Engineering; Dr. J. Venkalesh, GKVK; Prof. Muralidharan, NLSIU; Mr. K. S. Reddy, Co-ordinator, Research, IWST; Prof. S. Dasgyota, NLSIU; and Dr. B. Gowda, Department of Botany.

Discussions focused on a range of intellectual property-related issues, including the need for incorporation of customary law norms when developing legislation to protect the knowledge base and innovations of local communities; Peoples' Biodiversity Registers as possible incentives which could nurture biological and cultural diversity by providing financial rewards and social recognition to communities; questions about the exclusion of traditional knowledge systems by the present intellectual property system; questions on whether obtaining knowledge from traditional knowledge systems (e.g. 10,000 drug formulations documented in the Ayurvedic system of medicine) and developing it in another knowledge system (e.g. the modern allopathic system of medicine) constitutes an "invention" in the meaning of patent law; the role of secrecy, disclosure and documentation in traditional knowledge systems, customary law and informal intellectual property regimes; and the need to document customary law provisions and common property regimes for intellectual property protection of local innovators and creators.

Mumbai

On **Friday, October 2,** the mission met with Mr. S. Tandon, General Manager, and Mr. H. Kamal, Director, Indian Performing Rights Society (IPRS), and discussed copyright issues related to the use of traditional Indian music and dance forms and possibilities for compensating traditional musicians and tribal communities in India.

Ahmedabad

On **Saturday, October 3,** the mission attended a Consultation on Intellectual Property Rights of Grassroots Innovators at the Indian Institute of Management at Ahmedabad, which was organized by the Society for Research and Initiatives for Sustainable Technologies and Institutions (SRISTI) and chaired by Prof. A. K. Gupta, Professor of Management in Agriculture, Indian Institute of Management at Ahmedabad (IIMA) and Chairman of SRISTI. SRISTI is a non-governmental organization which was set up to strengthen the capacity of grassroots inventors and innovators engaged in conserving biodiversity. This objective is pursued by protecting the intellectual property rights of grassroots innovators, generating models for recognizing, respecting and rewarding creativity and by experimenting in order to add value to their knowledge.

The Consultation was chaired by Prof. A. K. Gupta, and attended by Ms. A. K. Ahuja, Joint Secretary, Ministry of Environment & Forest, Government of India; Mr. A. S. Reddy, Lecturer in Botany, Department of Bio-Science, Sardar Patel University; Mr. A. P. Mishra, PCCF; Mr. A. Patel, Mr. G. Vidayapith; Mr. A. Shah; Mr. B. M. Shah Gramvidyapith; Mr. B. S. Jadon, Research Scientist, Wheat Research Centre; Mr. B. T. Patel, Director, Research Ext. Education; Mr. B. Kothari, IIMA; Mr. A. Pandya and Mr. K. Desai, Nehru Foundation for Development; Mr. C. Shukla, Gram Swaraj Education Centre; Mr. D. V. Rangnekar, Vice President, BAIF Development Research Foundation; Mr. D. Pandya; Mr. G. L. Atara, Ayurvedic College; Mr. G. Raju, IRMA; Mr. G. Shetti, Centre for Social Justice, Ahmedabad; Mr. G. Raval; Mr. H. Shah, Chairman, Gujarat Ecology Commission; Mr. I. P. S. Ahlawat, Director, Research Extension Education; Mr. I. Kapoor, Director, CHETNA; Mr. I. Jani; Mr. J. Andhariya, AANANDI, Viksat, Nehru Foundation for Development; Mr. K. Shah; Mr. M. Mistry, DISHA; Mr. M. Parabia, Department of Biosciences, South Gujarat University; Mr. M. Baloch, BK Dwakra Sewa Association; Mr. N. Barot, UTHAN; Mr. R. Basant, IIM Ahmedabad; Mr. R. Navaty, SEWA; Mr. S. Virmani, Jan Vikas Ecology Cell; Mr. S. Iyangar, Kutch Mahila Vikas Sangathan; Mr. S. Patel, GANTAR; Mr. S. Varma; and Mr. V. S. Chand, IIMA. Discussions focused on the innovations and experiences of individual grassroots innovators, issues related to the conservation and compensation of indigenous knowledge systems, and future activities of the Honey Bee Network and Lok-Sarvani. A sister organization of SRISTI, the Honeybee Network, maintains one of the largest databases in the world on grassroots innovations, including more than five thousand small innovations with names and addresses of the innovators.

On **Sunday, October 4,** the mission had further discussions with members of SRISTI and the Honeybee Network as well as the Gujarat Grassroots Innovation Augmentation Network (GIAN). Discussions focused on theoretical and practical aspects of traditional knowledge and intellectual property, appropriate terminology to be used in the debates concerning traditional knowledge and intellectual property, understanding indigenous knowledge systems, and questions related to the commercialization and patent protection of grassroots innovations.

New Delhi

The meetings of the mission in New Delhi were kindly facilitated by Mrs. P. V. V. G. Kutty, Registrar of Copyrights & Deputy Secretary, Department of Education, Ministry of Human Resource Development, Government of India. Mrs. Kutty kindly accompanied the mission during all its discussions held in New Delhi.

On **Monday, October 5,** the mission met with Mr. P. Rai, Joint Secretary, Department of Industrial Development and discussed intellectual property issues related to the protection of traditional medicine, the implementation of the TRIPS Agreement and the accession of India to the Patent Cooperation Treaty. The mission then met with Dr. R. V. V. Ayyar, Secretary, Department of Culture, and discussed numerous legal and economic issues related to the protection and commercialization of traditional knowledge, the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty. The mission met with Mr. S. Babu and other officials of the Ministry of Environment and Forests, and discussed intellectual property issues related to the implementation of the Convention on Biological Diversity and the equitable sharing of benefits arising from access to, and use of, genetic resources.

The mission also met with Dr. S. Chaudhuri, Director, Archive and Research Centre for Ethnomusicology, American Institute of Indian Studies, and discussed the work of the Centre in the documentation of traditional Indian music and certain intellectual property provisions of licensing contracts for holdings of the Centre.

On **Tuesday, October 6,** the mission held consecutive meetings and discussions with Mr. M. C. Satyawadi, Additional Secretary, Department of Education, on copyright issues related to the protection of traditional knowledge; with Dr. P. U. Sharma, Deputy Director, Centre for Biochemical Technology, on intellectual property issues related to the patenting of biotechnological inventions; with Dr. M. Sharma, Secretary, and Dr. Natesh, Director, Department of Biotechnology, on bioinformatics and biodiversity assessment and conservation. The mission also met briefly with Dr. V. Shiva, Director, Research Institute for Science, Technology and Ecology.

From **Wednesday, October 7 to Friday, 9,** the mission participated in the WIPO Asian Regional Seminar on Intellectual Property Rights Issues in the Field of Traditional Medicines, which was jointly organized by WIPO in cooperation with the Department of Industrial Development, Ministry of Industry, the Department of Indian Systems of Medicine & Homeopathy, Ministry of Health, Government of India and the Associated Chambers of Commerce and Industry in India. During the Seminar the mission presented a summary and provisional data analysis of findings from the FFM and held discussions with numerous seminar participants from various Asian countries on the intellectual property needs, rights and expectations of traditional knowledge holders in those countries.

On **Friday, October 9,** the mission met with Dr. M. Rai, Deputy Director General (Crop Sciences), Indian Council of Agricultural Research, and discussed issues related to intellectual property and the conservation, sustainable use and sharing of benefits arising from the use of plant genetic resources for food and agriculture.

On **Saturday, October 10,** the mission met with Dr. Mashelkar, Director General, Council of Scientific and Industrial Research, and discussed intellectual property issues related to the documentation, international exchange and protection of traditional knowledge, especially as related to modern information networks.

Lucknow

The meetings of the mission held in Lucknow were kindly facilitated by the Indian Institute of Management Lucknow (IIML) and coordinated by Prof. K. Kumar, Dean, Academic Affairs, IIML.

On **Monday, October 12,** the mission held discussions with Prof. K. Kumar, Dean, Academic Affairs; Prof. S. Maheshwari, Prof. Murti, Dr. S. Srivartara, Research Associate, and other faculty members of the Indian Institute of Management Lucknow, on intellectual property topics related to traditional medicine and the transfer of technology.

The mission had a meeting with Dr. S. Kumar, Director, Central Institute of Medicinal and Aromatic Plants (CIMAP) which was attended by Dr. Jain, Dr. J. Singh, Dr. V. Ranjan and other staff members of CIMAP. Discussions focused on intellectual property aspects of the work done by CIMAP for the documentation, prospecting and conservation of approximately 600 medicinal and aromatic plants used in Indian systems of medicine; the research of the Institute based on traditional medicinal knowledge from both Ayurvedic literature and the traditional healers of tribal communities; and the intellectual property policy of the Institute for the protection of its research results.

The mission had discussions at the Central Drug Research Institute (CDRI) with senior officials of CDRI including Dr. A. P. Bhaduri, Scientist, Senior Deputy Director, Head of Medicinal Chemistry; Dr. R. K. Chatterjee, Senior Deputy Director, Head, Toxicology; Dr. R. K. Sharma, Documentation and Library Section; Dr. V. P. Kamboj, Director, and Dr. B. S. Srivastava, Head, Department of Microbiology; Dr. Z. Imam, Technical Information, Industrial Liaison and Planning Section; and Mr. Vinay, Patent Officer, Technical Information, Industrial Liaison and Planning Section. Intellectual property needs and concerns that were expressed included the fact that patent application fees and patent lawyers' fees were too high for developing country applicants; lack of access to intellectual property databases (high access fees and lack of developing country intellectual property information in such databases); lack of intellectual property training facilities and the cost of contesting patents; differing distinctions between medicines and health food under different national jurisdictions; the need for national treatment of clinical trials and drug admissions; the need for product patent protection in India; the need for benefit-sharing arrangements between traditional healers and institutions like CDRI which take into account the long research and commercialization cycle of scientific pharmaceutical research; and the need for improved patent information services.

The mission also held discussions at the National Botanical Research Institute (NBRI) with Dr. S. K. Jain, Director, Institute of Ethnobotany; Dr. R. R. Rao, Head, Plant Biodiversity Unit and other staff members of the Institute, which focused on the past work of the Institute; intellectual property aspects of benefit-sharing arrangements between the NBRI and traditional healers; and the conservation of medicinal plant diversity.

Bangladesh (October 13 to 14, 1998)

Dhaka

WIPO's meetings and activities in Bangladesh were kindly facilitated and coordinated by the Ministry of Commerce of the Government of Bangladesh, principally by Dr. M. A. Kamal, Joint Secretary, International Trade and Organizations (ITO), Ministry of Commerce. WIPO also identified resource persons with whom meetings were arranged by the Ministry of Commerce.

On **Tuesday, October 13,** the mission attended a meeting convened by Dr. Kamal to discuss the intellectual property needs, rights and expectations of traditional knowledge holders in Bangladesh. The meeting was attended, *inter alia*, by Mr. Md. F. Haque, Assistant Chief, Ministry of Commerce; Mr. Md. A. Hossain, Assistant Economic Advisor, Ministry of Commerce; Mr. M. K. Majumder, Deputy Scientific Advisor, Ministry of Science and Technology; Mr. M. Islam, Deputy Secretary, Ministry of Industries; Mr. Md. A. Rouf, Deputy Secretary, Health and Family Welfare; Mr. M. A. Jalil, Senior Assistant Chief, Ministry of Agriculture; Mr. A. Mazid, Deputy Secretary, Ministry of Commerce, Government of Bangladesh; Mr. A. N. M. Abdullah, Controller of Patents & Designs (Deputy Secretary), Ministry of Industries; Mr. B. Ansari, Patent Inspector, Patent Office, Ministry of Industries; Mr. M. Maniruddin, Registrar of Copyrights; Mr. Md. A. Matin, Registrar of Trade Marks (DY Secretary), Ministry of Industries, and Mr. A. K. M. M. Haque, Deputy Secretary, Ministry of Commerce.

On **Wednesday, October 14,** the mission held discussions with Mr. F. Mazhar, Executive Director and Ms. F. Akhter, Executive Director, Ubinig, Policy Research for Development Alternative, on intellectual property aspects of national legislation for access to, and benefit-sharing in respect of, biological resources and traditional knowledge in Bangladesh. The mission also held discussions with Mr. M. A. Wahab, Director (Administration), Hamdard Laboratories (Waqf), Dhaka. Hamdard Laboratories (Waqf) is a private sector company conducting pharmaceutical research and development based on traditional medicinal knowledge from the Unani Tibb tradition with branch offices in Bangladesh, India and Pakistan. Intellectual property needs articulated were the need for product patent protection, the reduction of patent application fees and an improved availability of patent information for small and medium sized enterprises in countries in South Asia.

Fact-Finding Mission 4

North America
November 16 to 30, 1998

The mission was conducted by Messrs. Richard Owens, Director, and Shakeel Bhatti, Program Officer, of the Global Intellectual Property Issues Division of WIPO.

United States of America (November 16 to 21, 1998)

Minneapolis, Minnesota

The meetings and field visits of the mission in Minnesota were kindly organized by Mr. Roy Taylor, Director, North American Indigenous Peoples' Biodiversity Project, Minneapolis. Mr. Taylor accompanied the WIPO delegation and provided substantive and logistical input throughout their work in Minneapolis and Cass Lake.

On **Monday, November 16,** the WIPO mission discussed with Mr. Taylor recent work on traditional knowledge (TK), intellectual property (IP) and biodiversity conservation undertaken by indigenous peoples' organizations in the United States of America (U.S.). Subsequently, the mission met with Mr. Paul Smith, Agriculture and Food Production Coordinator, Tsyuhekwa, Oneida Nation, Oneida, Wisconsin; Mr. Milo Yellowhair, Former Vice Chairman of Tribal Council, Oglala Sioux Tribe, Wounded Knee, South Dakota; and Mr. Taylor. Topics discussed at the meeting included Indigenous peoples' need for accurate information on international IP treaties; the commercialization of traditional Native American lifestyles (such as the Sundance Way of Life) and traditional practices, (such as Native American sweatlodges); intellectual property questions related to the prospecting of crops cultivated by traditional agricultural practices of indigenous peoples; the rights of native tribes in the U.S.; questions on geographical indications, specifically in relation to agricultural products produced on tribal territories; exclusive rights under customary law and informal IP-like regimes to the use of traditional knowledge elements held by certain tribal families; the significance of songs in authorizing the use of traditional practices and ceremonies under such regimes; the need for legal protection against illicit commercialization of practices, ceremonies and symbols, embodying traditional lifestyles; and the need for IP training targeted specifically at indigenous peoples in both developing and developed countries.

On **Tuesday, November 17,** the mission undertook a field visit to Cass Lake, Minnesota, to visit the wild rice beds maintained by the Leech Lake Band of the Minnesota Chippewa Tribe. "Wild rice" differs from paddy rice in aroma and appearance, which it acquires through symbiotic relationships with locally endemic soil bacteria. In Cass Lake, the mission and Mr. Taylor met with Ms. Shirley Nordrum, Water Resources Specialist, Division of Resources Management, Leech Lake Band of Minnesota Chippewa Tribe, Leech Lake Reservation. The mission conducted an on-site visit to the wild rice beds at Leech Lake and discussed topics including the need for labeling regulations on indigenous natural products; proposed bioprospecting activities related to the wild rice on the territories of the Leech Lake Band; questions of access to genetic resources on tribal territories and their regulation through tribal and federal law; the work of the Intertribal Agricultural Council and the National Tribal Federation regarding indigenous agriculture and biological resources; intellectual property aspects of the access permits to genetic resources which are issued by the Leech Lake Band under its cooperative agreement with the State of Minnesota; customary understandings and protocols in the Leech Lake Band of proprietorship related to the wild rice.

San Francisco, California

On **Wednesday, November 18,** the mission traveled from Minneapolis to San Francisco. In San Francisco, the mission attended the Sixth Annual Tribal Environmental Protection Agency Conference, organized by the U.S. Environmental Protection Agency (EPA) Region 9 at the Presidio, San Francisco. The mission attended Conference Sessions by Ms. Pam Overman on Development of Tribal Codes and Ordinances; by Mr. Vali Frank, Office of Regional Counsel on Environmental Enforcement in Indian Country; and by Mr. Willard Chin, Environmental Justice Team, on Environmental Justice and Title VI Update. Besides attending these Conference Sessions, the mission met with Mr. Jim Enote, Department for Natural Resources, Zuni Tribal Council, Zuni, New Mexico. Discussions focused on the work of the Zuni Tribal Council for the documentation of TK in New Mexico; the need to protect traditional ecological knowledge in the context of environmental conservation efforts; and the work of Mr. Enote in the context of the EPA Region 9 Tribal Conference.

On **Thursday, November 19,** the mission attended the final day of the Sixth Annual Tribal Environmental Protection Agency Conference. The mission attended a Conference Session presented by Ms. Stacey Benfer, EPA Environmental Education Coordinator, on Environmental Protection and Project Willow: Understanding Native American Culture through Environmental Education; and a Session on Tribal NEPA Pilot Projects in Region 9. The mission also attended the General Plenary Session of the Tribal EPA Conference. Besides the Conference, the mission held discussions with Prof. Stephen E. Cornell, Director, Harvard Project on American Indian Economic Development, Harvard University and Udall Center for Studies in Public Policy, University of Arizona. The Harvard Project on American Indian Economic Development was founded in 1987 at the Kennedy School of Government at Harvard University with the goal of carrying out comprehensive research on reservation economic development and to provide research findings and services to American Indian nations and organizations. Discussions with Dr. Cornell focused on the potential roles of IPRs in the economic development of American Indian nations.

Seattle, Washington

The meetings and work of the mission in Seattle, Washington, were kindly facilitated by Mr. Preston Hardison, Coordinator, Biodiversity Information Network (BIN21), Seattle, Washington.

On **Friday, November 20,** the mission attended a meeting at the Ethnic Cultural Center of the University of Washington. The meeting was attended by Mr. Hardison, Mr. Terry Williams, Director of Fisheries, Tulalip Natural Resources, Marysville, Washington; Ms. Susana Pimiento Chamorro, Biodiversity Programs, World Wide Fund for Nature – Colombia, Cali, Colombia; and Ms. Sue Johnston, Environmental Anthropology Department, University of Washington. Topics of discussion included the originality requirement under copyright law in relation to TK; the history of tribal self-government and sovereignty in the United States; issues related to the protection of sacred sites; the use of the existing intellectual property system for the protection of Native American names (family and tribal names), arts (designs, totems, carvings, songs), crafts and practices (e.g. smoked salmon production processes of the Tulalip Tribe); the need for systematic classification of TK as a first step towards its legal protection; the preservation of indigenous languages, oral traditions and intellectual property protection; informal IP-like regimes, embedded in customary law, which provide exclusive rights to families and tribes to perform certain songs; customary procedures for transferring and enforcing such rights; linkages that existed between such songs and names and resource allocations; traditional ecological knowledge of sustainable resource management, which is encoded in ceremonies, such as the Tulalip Salmon Ceremonies, which are practiced at the tribal, family and individual levels; the formalized application procedure which the Navaho nation has instituted for bioprospecting, anthropological and linguistic research and access to genetic resources on tribal territory; TK documentation efforts undertaken by tribal governments in the US; the need for specialized IP training for indigenous peoples.

Canada (November 23 to 30, 1998)

WIPO's meetings and activities in Canada were kindly facilitated by the Federal Government of Canada. Mr. Jock Langford, Senior Policy Analyst, Intellectual Property Policy Directorate, Industry Canada, accompanied the WIPO mission throughout its stay in Canada and was present at all its activities in an observer capacity.

Vancouver

The meetings in Vancouver were kindly coordinated by Ms. Kory Wilson-Goertzen, a student in the Native Law Programme of the University of British Columbia (UBC).

On **Monday, November 23,** Ms. Pam Brown hosted the Mission's visit to the British Columbia Museum of Anthropology and its extensive Aboriginal collections. Issues discussed included the sacredness of many objects in the collection; the need for Aboriginal people to access the UBC collection for ceremonies; the effort and difficulty in identifying the Aboriginal community from which artifacts originated and anthropological versus Aboriginal approaches for displaying Aboriginal collections. In the afternoon, the mission then attended an Open Roundtable on Aboriginal Intellectual Property at UBC. The Roundtable was attended by Ms. Kory Wilson-Goertzen; Ms. Tuma Young; Ms. Allyson Rowe; Ms. Allison Nyce, Nisga'a Tribal Council; Ms. Cynthia Callison, Callison & Hanna; Ms. Betty Wilson; Ms. Noreen Paul; Ms. Angeline Nyee; Ms. Barbara Buckman, Barrister and Solicitor; Ms. Nita Morven, Nisga'a Tribal Council; and Mr. Russel Wills, Cognetico, Inc. Discussions focused on the issue of traditional knowledge and the public domain; the development of research protocols for anthropological and linguistic research on TK in Aboriginal communities; IP-like provisions in customary law and specifically on the enforcement of such provisions; possible mechanisms for the authorization of use of TK according to customary law protocols; basic principles of ownership and property as reflected in Aboriginal societies by "house property" and entitlement stories; the Treaty Process in Canada and aspects of the Nisga'a Treaty related to the repatriation of cultural heritage; customary systems of 'naming,' and forms of transmitting and authorizing use of proprietary traditional names; the proprietorship of certain families over certain traditional songs and dances under customary law; questions of cultural misappropriation of Aboriginal art and ceremonies (specifically traditional masks and totem poles); methods of dispute resolution under customary law; the role of TK in relation to Canadian history and in a 'politics of memory;' the role of gender in the transmission of TK; and experiences of Aboriginal peoples with ethnobotanists and resource companies.

Calgary

On **Tuesday, November 24,** the mission attended a meeting with Elders and other representatives of the Blood Tribe at the Glenbow Museum which was kindly coordinated by Jerry Conaty. Present at the meeting were Elder Narcisse Blood, Board of Directors, Blood Tribe; Elder Frank Weaselhead; Mr. Martin Heavy Head, and other members of the Blood Tribe; and representatives of the Glenbow Museum. Topics of discussion included the need for legal and financial support in the repatriation of cultural artifacts; customary law provisions governing the creation, reproduction, transmission, and public display of traditional tepee designs among the Blood Tribe; the importance of Aboriginal languages for Aboriginal identity; ongoing cooperation and a Memorandum of Understanding between the Blood Tribe and the Glenbow Museum; IP- and human rights-aspects of genetic prospecting and patenting of gene sequences of indigenous peoples in the context of genomic research initiatives; and the distinction between secular designs, which may be reproduced for commercial purposes, and sacred designs, which may not be reproduced and commercialized, according to the customary protocols of the Blood Tribe. Following the meeting, the mission visited the Glenbow Museum and toured its Aboriginal collections.

In the afternoon, the mission attended a Roundtable on Traditional Knowledge and Intellectual Property Rights at the Arctic Institute of North America of the University of Calgary, which was kindly coordinated by Mrs. Cynthia Pyc. Participants at the Roundtable included Ms. Debbie Hellwig and Ms. Sally Listener of the

University of Lethbridge; Mr. Jerry Potts, Peigan Nation; Mr. Reg Crowshoe, Peigan Nation; Mr. Lori Villebrun, University of Calgary; Mr. Russel Barsh, Associate Professor, University of Lethbridge; Ms. Karen Peterson, Mr. Peter J. Snow, Mr. Rowland Apentiik, all of the Department of Environmental Design, University of Calgary; Ms. Monique Ross, Research Associate, Canadian Institute of Resources Law; Ms. Dora Unka; Ms. Celeste Strikes with a Gun, Peigan Nation; Mr. Mike Robinson, Executive Director, Arctic Institute of North America (AINA); Ms. Joan Ryan, Senior Researcher; Cynthia Pyc, Professional Associate; Mr. Karim-Aly Kassam, Theme School Director and Fraser Professor of Community Economic Development; other staff members of the AINA and many University of Calgary students. The topics raised by the participants included intellectual property aspects of the repatriation of cultural property and heritage; the protection of oral traditions; issues of linguistic and cultural translation when discussing the intellectual property protection of TK; the historical trade between first nations in songs protected by customary protocols; ways and means of maintaining the integrity of TK systems while developing legal means to protect them from illicit exploitation; customary methods of transmitting TK among Aboriginal communities and the cultural differences between First Nations affecting TK systems.

Saskatoon

On **Wednesday, November 25,** the mission toured the Wanuskawin Heritage Park, located at the site of a buffalo jump and medicine wheel. Subsequently, the mission attended a Roundtable on Traditional Knowledge and Intellectual Property Rights, coordinated by Martin Hryniuk, Darlene Speidel and Allan Morin. The Roundtable was attended, *inter alia*, by Ms. Delores Musqua, Ms. Daryle Gardipy, Ms. Eliane Hay, Ms. Iris O'Watch and Ms. Darline Speidel, all of the Saskatchewan Indian Cultural Centre (SICC); Ms. Cecil King; Ms. Linda Young; Ms. Kate Janvier; Mr. Ken Evett; Mr. Bill Lenne; Ms. Darren Arnault; Mr. Wayne Blondeau; Mr. Mervin Flamont; Mr. George Fayant; Mr. Peter Krebs, Dumont Technical Institute; Mr. Don Parenteau; Ms. Vanessa Beaudry; Mr. Tristan K. Zachow and Mr. Loma Docken of Dumont Technical Institute; Mr. Kennetch Charlette; Mr. Robert G. Doucette; and Mr. Allan Morin of the Métis National Council. Discussions included topics such as the observance of Aboriginal protocols at discussions on TK and IP, including the present Roundtable; possible structures of accountability between indigenous peoples and external institutional processes, such as the present WIPO fact-finding mission; the nature of custodianship of indigenous peoples over their TK; the reclaiming of sacred sites, including burial sites, buffalo jumps and medicine wheel sites; IP-like regimes governing the exchange of songs and dances between First Nations before the arrival of Europeans; indigenous concepts of ownership and property; intellectual property aspects related to human tissue samples of indigenous peoples and their use for genomic research; the misappropriation of songs, dances and dress by Europeans and other First Nations; the advantages and disadvantages of Pan-Indianism in Canada and the USA, as exemplified in Pow Wows.

Ottawa

On **Thursday, November 26,** the mission attended a session of the Government/Indigenous Working Group of Article 8(j) of the Convention on Biological Diversity, held at the Canadian Museum of Nature. Indigenous members of the Working Group discussed topics including assumptions of ownership and individualism that underlie modern IP systems; procedural and institutional aspects of the full and effective participation of indigenous peoples in the WIPO workprogram on IP and TK; and the role of women in the custodianship and transmission of TK.

In the afternoon, the mission visited the Museum of Civilization and its extensive Aboriginal collections. In the evening the mission attended a Cultural Night in the Museum of Civilization which was kindly organized by Stephen Augustine on behalf of the Government of Canada on the occasion of the WIPO fact-finding mission. The Cultural Night included the performance of Aboriginal music, dances, and story telling.

On **Friday, November 27,** the mission attended a Roundtable with Federal departments, including Environment Canada, Industry Canada, the Canadian Intellectual Property Office, the Department of Foreign Affairs and International Trade, Canadian Heritage, Justice Canada, Indian Affairs and Northern Development, Agriculture and Agri-Food Canada and Natural Resources Canada. Specific issues discussed at the Roundtable included a working paper on intellectual property and indigenous peoples in preparation by the Canadian government; the work of the Arctic Council; and indigenous issues at the Summit of the Americas and the UN Draft Declaration on the Rights of Indigenous Peoples. In the afternoon, the mission attended an Open Roundtable with Aboriginal representatives, artists, government officials, and intellectual property experts. The Roundtable was attended by representatives from seven national aboriginal organizations, namely the Assembly of First Nations, the Congress of Aboriginal Peoples, the Métis National Council, the Inuit Tapirisat of Canada, the Native Women's Association of Canada, the Metis National Council of Women, and the Inuit Women's Association of Canada. These seven national Aboriginal organizations were offered financial support by the Department of Foreign Affairs to travel to Ottawa to attend the Roundtable. At the invitation of the Department of Foreign Affairs the Roundtable was chaired by Ms. Sheila Genaille, President, Metis National Council of Women. Topics discussed at the Roundtable included the increasing loss of traditional knowledge; the need for the legal protection of TK and the role of indigenous peoples in this process; suggestions for procedural and institutional aspects of such a process; the role of women in the transmission of TK; and the conservation of natural resources related to the conservation of TK.

Iqaluit

On **Saturday, November 28,** the mission traveled from Ottawa to Iqaluit, Baffin Island. In Iqaluit, the mission attended a discussion meeting on intellectual property and the traditional knowledge of the Inuit at the Inuksuk Highschool Library. The discussion was hosted and chaired by Ms. Okalik Eegeesiak, President, Inuit Tapirisat of Canada (ITC); and included Mr. John Cheechoo, Communications, ITC; Mr. Leo Tulugajuk, Nuitaq Cultural Institute; Ms. Mary Wilman, Nunavut Social Development Council; and Mr. Doug Stenton, Inuit Heritage Trust. Topics of discussion included the work of the Inuit Heritage Trust on the management of archeological sites and archival and ethnographic collections that originated in Nunavut settlement areas; the work of the Niutaq Cultural Institute on TK; the development of a TK Strategy by the Nunavut Social Development Council, which provides benchmarks on key issues where Inuit culture is most threatened; IP-related issues identified by the ITC at the local and national levels, including research protocols for scientific and anthropological research on Inuit society, the mass production by non-Inuit artists and enterprises of Inuit designs; the reproduction of *Amauti* (Inuit women's baby carrier/coat) patterns by non-Inuit enterprises; the need to document the types of practices and protocols that Aboriginal people used to promote and protect their intellectual creations before the arrival of explorers from other continents; the use of certification marks to protect Inuit art, specifically stone carvings; different objectives of protection for different categories of TK, such as commercial objectives (e.g. protection of Inuit stone carvings from illicit commercialization) and the conservation of Inuit culture (e.g. the protection of traditional Inuit stories from disappearance); the need for further consultations among the Inuit about IP and TK in order to raise awareness, identify issues, and develop means of addressing them.

On **Sunday, November 29,** the mission discussed traditional Inuit carving techniques, imitation and originality in traditional Inuit designs, and the commercialization of Inuit art, especially sandstone carvings, with Muktak, an artisan. The mission also visited Inuit collections at the Iqaluit museum, where a reception was kindly hosted by the ITC. The mission then traveled from Iqaluit to Montreal.

Montreal

On **Monday, November 30,** the mission attended a Roundtable on Intellectual Property and Traditional Knowledge at the offices of the Grand Council of the Cree (GCC), Montreal. The Meeting was attended by Elder Robbie Matthew, Elder Sally Matthew, Elder Laurice Petawabaro, and Elder Smally Petawabaro, all of the Cree Nation; Ms. Ginette Lajoie, Cree Regional Authority; Ms. Catherine Lussier and Ms. Carole Levesque of INRS Culture et Societé; Mr. Robert Kanatewat; Ms. Janie Pacharo, Board of Compensation; and Mr. Phillip Awashish and other Cree and GCC officials. Topics covered in the Roundtable included the com-

262

munal ownership of TK among the Cree; the creation of an Elders' Council within the Cree Nation in order to document the TK; the preference of Cree Elders for customary law systems over the application of formal IPR protection systems for the protection of their TK; the right of translation for Cree children's songs and stories which have been translated and published abroad; the Cree involvement in the James Bay Northern Quebec Agreement, including the provisions of the agreement relating to traditional environmental knowledge (TEK); the need for recognition of TEK in policy making processes for sustainable resource management; the use and protection of TEK used in environmental impact assessments (EIAs); issues related to the collection, compilation, and management of TEK after its documentation and collection; the role of TEK in the decision making process for environmental projects following the EIA; elements of Cree TEK harvested for a hydrodam project, including empirical data, historical data and conceptual data; the composition of TEK from elements including traditional knowledge passed on for generations, contemporary concepts of nature and environment, and ongoing experiences with the environment and natural resources; the two requirements of respect and understanding for the sharing of TEK by Elders under customary protocols; the "understanding principle" as a condition for the transmission of TEK; and the disadvantage of considering TEK as a single, homogenous body of TK, which is shared by the whole community.

In the afternoon the mission attended a Roundtable at the Kanien'kehaka Raotitiohkwa Cultural Center, Kahnawake. The Roundtable was attended by Mr. Andrew Delsshe Jr.; Mr. Brian Deer; Mr. Martin Loft, Kanien'kehaka Raotitiohakwa Cultural Center; Mr. Kanatakta, Kanien'kehaka Raotitiohakwa Cultural Center; Mr. Paulin Owisokon Lahache; and Mr. Philip Deering. Topics discussed at the Roundtable included IP aspects of the repatriation of cultural heritage from museums in Canada and abroad; issues on the use of Mohawk symbols, such as the 'World on turtle back'; the passing off of artwork produced by non-native artists in the USA and in Canada as native art; plant breeding and intellectual property; issues related to the costs of obtaining trademark protection; appropriate procedures for obtaining the prior informed consent of Aboriginal peoples before initiating bioprospecting, anthropological or linguistic research; the need for protection of traditional lifestyles of Aboriginal peoples from commercial exploitation such as the commercial organization of Mohawk Summer Camps on other continents by non-Mohawk enterprises; and customary dispute resolution mechanisms after violations of rights under customary law.

Fact-Finding Mission 5

Central America
January 17 to 22, 1999

The mission was conducted by Mr. Richard Owens, Director of the Division of Global Intellectual Property Issues of WIPO, and Mr. Octavio Espinosa, Director-Counsellor in the Cooperation for Development (Law and Industrial Property Information) Department of WIPO.

Guatemala (January 17 to 20, 1999)

The WIPO meetings and activities in Guatemala were coordinated by the Ministry of Foreign Relations of Guatemala through its Permanent Mission in Geneva and the Chancellery in Guatemala, which made Mr. Edgar Rolando Barrios Rodas, Director of International Political Economy, available to the mission. The mission was also assisted by the Ministry of Economy itself, which provided the services of Mr. Manuel Duarte, Legal Adviser and Vice-Minister of Economy, who accompanied the WIPO delegation on all the visits and in all the meetings held in Guatemala City.

Tecpán

On **Sunday, January 17,** the representatives of WIPO visited Tecpán, founded in 1534 and considered the first Spanish capital of Guatemala. They were accompanied by Mr. Francisco Cali, Coordinator of the Indigenous Rights Department at the Legal Action Center for Human Rights, Mrs. Celestina Balán de Cali, Mr. Juan León, General Coordinator of the Maya Defense Agency and Dr. Leticia Velásquez de León.

A discussion meeting was held at the Tz'utujil Art Gallery in Tecpán. The meeting was attended by Mr. Benjamín González, director of the gallery and President of the Federation of Indigenous Corporations of Guatemala, the painter Julio César Sánchez, Mr. Felipe Mejía, also a painter and member of the Cachiquel Youth Association, Mr. Audelino Sajbín Barreno, another painter, and Eulogio Tamup, a Mayan expert in natural products. Messrs. Francisco Cali and Juan León and Dr. Leticia Velásquez de León were also present.

Among other things the discussions centered on the difficulty that indigenous artists encountered in establishing sufficient contact with the outside world to make themselves known and disseminate their works, which above all entailed using modern communication media such as the Internet for access to national, regional and international markets; the difficulty also of ensuring that local artists' communities have more direct access to the cooperation and communication facilities obtainable from abroad; the copying or appropriation of certain original Mayan traditions, such as culinary recipes and typical dishes, incense, traditions and poetry, without acknowledgement of the origin of such manifestations of culture, and still less of the philosophical and spiritual meaning that they have for the communities that produce them; the indiscriminate marketing of traditional knowledge by persons having no connection with the communities in which they originated; and the practice of Mayan natural and traditional medicine, including the spiritual implications of that activity for Mayan communities.

On the afternoon of the same day, the WIPO delegation visited the Iximche Archeological Park, a Mayan site of archeological and traditional religious significance. The visit included places in which traditional religious ceremonies based on Mayan traditions were held.

Guatemala City

On **Tuesday, January 18,** the WIPO delegation visited the Ministry of Culture and Sport and met Dr. Carlos Enrique Zea-Flores, Vice-Minister of Culture and Sport; Mr. Gaspar Pedro González, Adviser to the Minister of Culture on matters of Mayan culture, Mrs. Mercedes Flores, Director General of the Cultural and Natural Heritage at the Institute of Anthropology; and Dr. Gastón Samayoa, Advisor to the Ministry of Culture on intellectual property matters.

The delegation was informed of the activities of the Institute of Anthropology through its Registry of Archeological, Historic and Artistic Property, which is currently becoming more important because of its efforts to recover the pre-Hispanic cultural heritage of Guatemala by means of treaties with other countries. It was mentioned that in 1998 some 500 artifacts had been recovered and that others, having been taken from the country to be studied, were on their way back. The Registry of Archeological, Historic and Artistic property likewise allowed the registration of manifestations of the county's intangible cultural heritage, including expressions of folklore, handicraft, traditions and legends.

The meeting also covered, among other things, the efforts of the Government of Guatemala to promote recognition at international level of copyright of indigenous communities in expressions of their culture; the problem caused by the copying of traditions and typical designs of developing countries, including Guatemala, by persons and companies in developed countries, without due authorization or even acknowledgement; the activities of persons from abroad who come to the country to learn Mayan spiritual and religious ceremonies and traditions and then reproduce them abroad without proper knowledge of or respect for the spiritual background, a practice that might be described as "tradition piracy."

The representatives of WIPO then met Mrs. Edith Flores de Molina, Vice-Minister of Economy, at the Ministry of Economy and Trade. Mrs. Flores mentioned that Guatemala's new copyright legislation expressly contemplated the enactment of special provisions on folklore. She also referred to the existence of a law on handicraft protection and development (Decree 14-96), which provided for the establishment of a Register of Craftsmen.

The mission visited Guatemala's *Universidad del Valle,* and had a meeting with Dr. Carlos Rolz-Asturias, the Dean of the University's Research Institute. Dr. Rolz-Asturias explained some of the programs and activities conducted by the Universidad del Valle on subjects related to the environment, which had brought it into closer contact with traditional communities of the country. Mention was made of the difficulty that indigenous communities tended to have with the legal protection and marketing of their traditional knowledge, as in certain cases such practices were not in keeping with their cultural values.

The Universidad del Valle has not had until now any policy for the patenting of its technological developments and other research findings, but recently it started to consider the advisability of changing that policy. Relations between universities, the private corporate sector (both national and foreign) and indigenous communities in possession of technological knowledge could be dealt with more thoroughly, and it was suggested that WIPO be a forum for the production of guidelines or recommendations to facilitate the conclusion of agreements between those sectors.

Thereafter the delegation visited Rafael Landivar University, where the WIPO representatives were received by Mrs. Guillermina Herrera, Vice-Rector of the University. A meeting was then held with Mr. Rolando Escobar, Legal Adviser; Mrs. Anabella Giracca, Deputy Director of the Linguistics Institute; Mr. Miguel Flores, Director of Communications; and Mr. Mario Sosa, Director of the Computing Center.

It was said that the oral traditions of the Mayan and other indigenous communities had a part to play in preserving the history of their peoples, over and above their purely aesthetic or artistic function. Words communicated orally have a role in the survival of the people and the community in addition to their functional role of conveying necessary information, for instance in the prevention of illness or the preservation of health. It was also said that what might be called the piracy of recipes for natural medicines, oral traditions and traditional designs for textiles, was committed by foreigners who settled in local communities to learn those manifestations of culture and then to remove them and reproduce them without adequate knowledge or interpretation of the underlying original traditions. The question was raised of the extent to which copyright could protect indigenous manifestations of culture and tradition against appropriation, adaptation, misrepresentation, transformation or mutilation by unauthorized persons.

At the end of the day the WIPO representatives had a meeting with Mr. Demetrio Rodríguez, Director of the Cholsamaj Publishing House. Mr. Rodríguez spoke of the difficulties faced by publishing houses involved in the dissemination of works based on indigenous traditions, which were partly due to their ignorance of prevailing copyright legislation and its scope and limitations. Another problem area was that of access to objects and artefacts of Mayan culture kept outside the country in foreign museums or institutions, and consequently difficult to reproduce for the production and distribution of publications whose purpose was to bring such expressions of national culture to public notice. It was also mentioned that there was interest in the possibility of translating and publishing works on Mayan culture already published abroad in foreign languages, but that it was not always easy, owing to the need to take out licenses and secure the cooperation of foreign publishers.

On **Tuesday, January 19,** the representatives of WIPO had a meeting with Mr. Victor Paz, Assistant to the Council of Mayan Organizations of Guatemala (COMG), Mr. Juan León, General Coordinator of the Maya Defense Agency and Dr. Leticia Velásquez de León.

Mr. Paz explained the work of the COMG on matters concerning indigenous peoples and human rights, and his role in strengthening the organizations, structuring indigenous law and attending to the human development of the bodies involved with the Council. The associations affiliated to the COMG specialize in various aspects of Mayan culture, including education, cultural and academic research, environmental and forestry education and corporate development for smaller businesses. It was pointed out that the formal grant of intellectual property rights could in practice prove too troublesome and costly for traditional smaller businesses, but that one could work on the setting up of an "intellectual property committee" which would be better able to cope with the needs of members.

It would also be appropriate to explore the possibility of dealing with collective intellectual property rights, as the creations and innovations of indigenous communities that qualified for protection were not always the property of individuals but rather of the community as a whole. It seemed important to the COMG to accord intellectual property rights in three areas, namely the protection of cultural rights, including language and typical textile designs; traditional science and technology, including traditional medicine, agricultural, forest and environmental protection systems, land uses, organizational models and astronomy based on the Mayan calendar; and indigenous art, including all works of three-dimensional art and music and other works produced by indigenous communities.

Afterwards the Ministry of Foreign Relations of Guatemala invited the representatives of WIPO to a lunch attended by Mr. Carlos Jiménez Licona, Vice-Minister of Foreign Relations, Mrs. Flores de Molina, Vice-Minister of Economy; Mr. Carlos Zea-Flores, Vice-Minister of Culture; Mr. Edgar Barrios, Director of International Political Economy at the Ministry of Foreign Relations, and Mr. Emanuel Duarte, Legal Adviser to the Ministry of Economy.

The discussions centered among other things on the possibility of Guatemala ratifying and applying Convention No. 169 of the International Labour Organization (ILO), the process of constitutional reform under the peace agreements recently concluded in the country and the development of a National Biodiversity Strategy, including the possibility of legislating on the subject.

Later the same day, the delegation visited the Fund for Guatemalan Indigenous Development (FODIGUA), and had a meeting with Mr. René Alejandro Quixtan, Project Director; Mr. Joaquín Potzán Joz, Secretary of the National Board of Principals; and Mrs. Aura María Coti, Education Analyst.

It was explained to them that FODIGUA was a fund for continuous and integrated development in the interest of Guatemalan indigenous peoples which worked on the financing of projects in a number of areas, including health, education, environment and infrastructure. There is a great wealth of knowledge in Mayan culture which in recent years has been flourishing once again and is in the process of being reassessed. However, unauthorized persons have been raiding the rich store of knowledge of the ancient Mayan people and publishing what they have taken, sometimes with alterations, without mentioning the source from which they gained the knowledge. FODIGUA aims to give priority to the use of appropriate technology, with special emphasis on natural methods of soil conservation, plant fertilization and the dissemination of traditional medicines and works of Mayan culture. It was mentioned that FODIGUA was also able to finance the patenting, protection and marketing of technology produced by the country's indigenous communities.

On **Wednesday, January 20,** the WIPO mission visited the Association of Social Research and Study (ASIES), at which time they had a meeting with Mr. Carlos Escobar, Secretary of the Management Board, Mr. Carlos Vega, Legal Adviser, and Mr. Carlos Secaira, Deputy Executive Secretary. Among the subjects covered in the course of this meeting was the application of Convention No. 169 of the International Labour Organization in Guatemala, which requires the consultation of indigenous communities in connection with programs and activities that might affect their rights; the activity of ASIES in the study and dissemination of the unwritten law of indigenous cultural groups in the country, for instance concerning the settlement of disputes; and the difficulty of promoting greater use of the modern intellectual property system by the people of Guatemala, most of whom are indigenous Maya, with the attendant need for a campaign of information and familiarization to make intellectual property institutions better known.

The representatives of WIPO then had a meeting with Mrs. Cristal Ruiz Bode, Director of the Inter-Ethnic Study Institute of the San Carlos University. Mrs. Ruiz related the problem of information on the traditions of indigenous communities being appropriated by foreigners and published, sometimes with alterations, but without acknowledgement of the source or of any authors' rights that might apply. She also discussed some of the social and economic causes of activities which, from the point of view of modern intellectual property law, could be considered infringement or pirating of protected material. For example, a state of economic penury could cause a drift of rural manpower into light industries such as the textile industry, where goods bearing registered trademarks and other distinctive signs could be reproduced and marketed locally. Another thing that was noticeable was the distorting effect resulting from demand in the commercial and tourist sectors which induced companies to produce typical clothing designs reproducing original designs of other indigenous communities. Such a situation could result in simplification or dilution or even the loss of certain traditional designs.

Panama (January 21 and 22, 1999)

The WIPO mission to Panama was coordinated by the Ministry of Foreign Relations of Panama, acting through its Permanent Mission in Geneva, especially Ambassador Leonardo Cam Bins, and the Chancellery in Panama. The Chancellery provided the WIPO delegation with the services of Mrs. Mirlo Guerra de Ávila, Assistant to the Directorate General of International Organizations of the Ministry, whose presence and company made the mission's work easier during its entire time in Panama.

Panama City

The Chancellery convened a meeting with the various national authorities on intellectual property matters, indigenous affairs, culture and the environment, which took place at the headquarters of the Ministry of

Commerce and Industry in Panama City. The following were present: Mrs. Luz Celeste Ríos de Davis, National Director of Industrial Property (DIGERPI); Ministry of Commerce and Industry; Mrs. Nelly Herrera, National Under-Director of Industrial Property (DIGERPI); Mrs. Marisol Dumas, Department of Protected Areas, National Authority for the Environment; Mr. Heraldo Harding, Director of International Cooperation, National Institute of Culture (INAC); Mrs. Mariza Salazar, National Secretary of Science and Technology; (SENACYT); Mr. Eduardo Ayu, Public Prosecutor, Tenth Circuit, Department of Public Prosecution; Mr. Aquilino Tejeira, Department of Intellectual Property, Directorate General of Customs, Ministry of Economy and Finance; Mrs. Jerónima Branca, National Director of Indigenous Affairs Policy, Ministry of Government and Justice; Mr. Jorge Constantino, Director, Global Affairs, Ministry of External Relations; Mrs. Mirlo Guerra de Ávila, Assistant to the Directorate General of International Organizations, Ministry of Foreign Relations.

At this meeting the representatives of WIPO explained the background to and objectives of the mission, and the activities planned within the framework of the WIPO program of global intellectual property issues, especially the sub-program on intellectual property rights for new beneficiaries.

For their part, the various authorities spoke on activities carried out under their areas of competence. Particular mention was made of the activity of the Directorate General of Industrial Property Registration (DIGERPI) in searching for better means of protection for the *mola* or embroidered blouse, as the main expression of native Kuna handicraft, including the possibility of using the existing provisions applicable to industrial designs, appellations of origin and other geographical designations, as well as copyright.

There was also a mention of the need to strengthen national policy on biosafety, bioprospecting and intellectual property, including fuller treatment of traditional knowledge and provisions on access to the country's genetic resources. The various forms of cultural expression also required greater protection, with respect to both their physical conservation and recognition of and respect for the intellectual rights embodied in them. A national system of cultural property had been introduced which would serve as an inventory of both tangible and intangible elements of the country's cultural heritage. Mention was also made of the possibility of the districts that encompassed indigenous communities organizing themselves with a view to improving the protection of expressions of their culture by means of intellectual property, inasmuch as those districts enjoyed legal personality within the national legal order.

Afterwards the representatives of WIPO met in the Afro-Caribbean Museum of Panama with the following persons: Mrs. Melva de Gooding, President, Society of the Friends of the Museum of Afro-Caribbean Art (SAMAAP); Mrs. Romualda Lombardo, member of the SAMAAP; Mr. Eduardo Smith, member of the SAMAAP; Mr. Etherbert Mapp, former President of the SAMAAP; Mr. Heraldo Harding, Director of International Cooperation, National Institute of Culture (INAC); Mrs. Gloria Russell, member of the SAMAAP; Mrs. Mirlo Guerra de Ávila, Assistant to the Directorate General of International Organizations, Ministry of Foreign Relations; Mr. Jorge Constantino, Ministry of Foreign Relations.

At the meeting, comments were made on *inter alia* the situation caused by the production of *molas* manufactured abroad, for instance in Japan, which were sold on international markets such as in the United States. It was said that foreigners would visit the islands of San Blas (a region populated by members of the native Cuna community), where they learned the techniques for making *molas* and subsequently reproduced those techniques abroad. With regard to expressions of the culture of the Afro-Caribbean community, a mention was made of the interest of disseminating the art and music of the community, even though there were difficulties of a financial nature hampering more widespread teaching and dissemination of expressions of Afro-Caribbean culture within the country.

Later, at the headquarters of the National Handicraft Foundation (FUNDARTE) in Old Panama, the representatives of WIPO had a succession of meetings with the Panamanian Society of Authors and Composers (SPAC), with national artists and folklorists, with representatives of the Panamanian Institute of Copyright (IPDA) and with representatives of Kuna communities.

268

In the course of those meetings it was said that Panamanian music had developed in a way that resulted in dilution and partial loss of the native, original and authentic properties that it once had. There was a gradual but noticeable tendency for young people to neglect the cultural and folklore traditions and manifestations of Panama. The geographical and historical position of the country as an international crossroads had enriched its folklore and culture.

The difficulty of protecting expressions of folklore by means of ordinary copyright legislation was recognized, and it was suggested that it might prove necessary to create a new right or some form of *sui generis* protection specially designed for folklore. There was legislation with which to prohibit the importation of handicrafts and products manufactured abroad that were imitations or copies of Panamanian handicrafts, especially *molas*, tunics and dresses typical of Panama. It was said that there was insufficient knowledge of the prevailing intellectual property laws which might protect cultural expressions in a variety of forms. Nevertheless, the unsuitability of the formal intellectual property system for recognizing and protecting expressions that belonged to a community as a whole rather than to individuals, actually made it possible for the copying and pirating of craft products to take place. The organizations representing indigenous communities were working to find means of protecting Kuna art, and also some form of protection of collective rights within the intellectual property system. Protection of the Panamanian *mola* was considered to be of prime importance on account of the cultural and economic value that it had for Panama's indigenous communities.

Madugandi

On **Friday, January 22,** the representatives of WIPO visited the Kuna district of Madugandi, stopping in the Kuna village of Akwa Yala within that district. The visit was conducted in the company of Mrs. Mirlo Guerra de Ávila, Miss Verónica Palmarola and Miss Belén Espino, all from the Ministry of External Relations.

In Akwa Yala the representatives of WIPO had a meeting with the local *sahilas* or chieftains who, through an interpreter, explained various aspects of their concerns, needs and expectations concerning the preservation of their rights, both tangible and intangible, and especially expressions of their culture. These concerns and interests stem from the intimate relationship that members of indigenous communities have always had with their territory and to nature, and from the eminently conservationist character of their lifestyle. Greater respect and protection for craft works, including *molas* and hammocks, was considered important not only for preserving the culture of the community but also for their economic value.

One problem mentioned was that of visiting doctors who come from the city in search of information from traditional healers on the use of plants or other natural resources for curing diseases, which information they later exploit on an industrial scale or publish without any acknowledgement of the source of the information or without sharing the economic benefits of the exploitation. It was becoming clear that one had to learn to administer traditional knowledge on the use of forests and plants, and especially medicinal plants, with a view to achieving some form of equitable distribution of any economic benefits that might result. It was important for Kuna communities to have their share of recognition and of the economic benefits, if any, derived from the knowledge disclosed.

Panama City

On their return to Panama City, the representatives of WIPO met the following officials at the headquarters of the National Coordinating Agency for Indigenous Peoples of Panama (COONAPIP): Narciso Pacheco, Cacique General; Mrs. Abigail González; Mr. Justo Gallego; Mrs. Luz Mil Chacharé; Mr. Cándido Mesua; Mr. Franklin Mesua; and Mrs. Clelia Mesua.

Among other things the officials expressed their anxiety over the danger to the indigenous peoples of Panama that lay in the approaches of multinational companies looking for access to the traditional knowledge possessed by those peoples and to the natural resources that the indigenous communities kept and preserved in accordance with their culture. Questions were asked on how the indigenous peoples of Panama could more directly administer the exploitation of the natural resources whose conservation and use they knew about, and how they could secure the economic benefits that might derive from such exploitation for investment in their own communities. It seemed necessary to avoid the risk that the information possessed by the indigenous communities would be extracted from them and published or exploited without their participation or authorization.

Fact-Finding Mission 6

West Africa
January 18 to February 2, 1999

The mission was conducted by Mr. Simon Ouedraogo, Senior Program Officer, Cooperation for Development, Bureau for Africa and Miss Faith Odibo, Senior Program Officer, of the Global Intellectual Property Issues Division, of WIPO.

Nigeria (January 18 to 21, 1999)

The meetings in Nigeria were organized with the kind assistance of the Nigerian Copyright Commission, the National Office for Technology Acquisition and Promotion, the Nigerian Folklore Society and the Bioresources Development and Conservation Program.

Lagos

On **Monday, January 18**, the delegation met with a group of Nigerian intellectual property lawyers at a breakfast meeting to discuss the legal issues raised by the protection of traditional knowledge systems. The meeting was attended by Mrs. Uwa Ohiku of Etti, Edu and Co., Mr. Obatosin Ogunkeye of Allen and Ogunkeye, Mr. Yomi Audifren of Caxton Martins and Co. and Mr. Ovie Ukiri of Ukiri and Shasore. The issues discussed included the complexities of protecting knowledge in itself, the communal ownership of traditional knowledge and the difficulties in protecting such knowledge posed by the requirements of the existing intellectual property system. It was recognized that the questions of access to biological resources and benefit-sharing was one which the legal profession had to get involved in as well as contribute to the government's effort in preparing appropriate legislation. The group gave the delegation some useful insights into the ongoing work in exploiting herbal medicinal knowledge in the country, as well as some relevant contacts.

That afternoon, the delegation met with the Director General of the National Office of Technology Acquisition and Promotion (NOTAP), Dr. David Okongwu, and Mrs. Funke Araba, Assistant Director. The issues discussed at the meeting included the need to have an institution responsible for the coordination of the country's efforts in protecting traditional knowledge, awareness-raising on the use of the intellectual property system and the need to develop legislation or guidelines on access to biological resources.

On **Tuesday, January 19,** the delegation had a meeting with the President of the Nigerian Union of Traditional Herbal Medical Practitioners (NUTHMP), Chief A.A. Omotosho and the Bioresources Development and Conservation Program (BDCP), represented by Professor E.N. Sokomba, Executive Director, and Mr. Anthony Onugu, Environmental Economist.

The BDCP is a non-governmental organization involved in biodiversity conservation and socio-economic development. The organization has been actively involved in the international processes in support of the Convention on Biological Diversity (CBD) 1992, working in the field of biodiversity protection and promotion in several countries. It assists with bioprospecting efforts with a view to identifying bioresources in the country that may be useful in the production of phytomedicines and drugs. Their focus is on drug development and conservation. The organization has a long-standing relationship with traditional healers in the country through the NUTHMP.

Dr. Omotosho expressed his concern at the lack of recognition for traditional medicinal knowledge in the country both by potential users and the government, the exploitation of this knowledge by researchers and students, and the lack of regulations, guidelines or legislation for its protection.

The discussion also touched upon the communal nature of such knowledge as well as the spiritual and religious issues surrounding its protection and access to it. Traditional practitioners, the WIPO delegation was informed, are now increasingly aware of the value of their knowledge and of its exploitation which has led them to develop informal methods for protection of this knowledge. Dr. Omotosho asserted that a large part of the exploitation takes place under the auspices of researchers and students (both local and foreign) through local intermediaries. He called for a multi-disciplinary awareness-raising seminar to enable all the stakeholders such as research institutions, rights-holders, the Ministry of Justice and law reform commissions, the environmental protection agency, unions of traditional medical practitioners, pharmaceutical companies and members of the legal profession, to discuss these matters openly.

The meeting with the BDCP focussed on the need to develop regulations on access to biological resources, the need for capacity building within the country on the implications of these issues at every level, (including government and the private sector,) the development of legal expertise to advise rights-holders and potential users of these rights, and the importance of developing appropriate benefit-sharing mechanisms which take into account the intellectual contribution of the herbal medical practitioners in drug development. One of the key difficulties identified by the BDCP on these issues is the complexity of determining what value to assign to traditional knowledge. Training on the basics of intellectual property protection and drafting of legislation on access to biological resources were highlighted as areas of need.

Abuja

On **Wednesday, January 20**, the delegation traveled to Abuja for the day where they had their first meeting with Professor Charles Wambebe, Director General and Chief Executive Officer of the Nigerian Institute for Pharmaceutical Research and Development (NIPRID), an internationally acclaimed pharmacologist. The Institute was set up in 1987 as a parastatal of the Federal Ministry of Science and Technology with the primary objective of harnessing natural raw materials in the country for use in the pharmaceutical industry by targeting the development of excipients and active ingredients and the development of traditional medicine. It also has the mandate to monitor the quality of orthodox medicine in the country. The institute, a United Nations Development Program (UNDP) approved African Regional Center for the Industrial Utilization of Medicinal and Aromatic Plants, has substantial government support and receives grants in material and financial terms from foreign institutions, intergovernmental organizations and other governments.

The Institute is well supported by highly qualified staff and equipped with modern laboratory equipment and infrastructure. The staff rely on their strong cooperation with traditional medical practitioners with whom they have agreements on the use of the samples which are provided by them and on the sharing of any benefits that arise from discoveries based on these samples. Some of these traditional medical practitioners are appointed as consultants to the institute. Their work, *inter alia*, spans the testing of sample plants and herbs provided by the traditional medical practitioners for active ingredients, running toxicology tests, investigating the effect of these medicines by simulating ailments, and producing drugs in the form of syrups, tablets or capsules. Scientists from all over Africa are encouraged to use the services of the institute free of charge.

The discussions at the meeting covered the need to establish working and mutually beneficial relationships with traditional medical practitioners, the need for awareness-raising on the use of the intellectual property system (particularly the patent system), the workings of the Patent Cooperation Treaty (PCT) and the intellectual property implications of transfer of technology.

The delegation next had a joint meeting with the Registrar's Department, Ministry of Commerce and Tourism and the Federal Environmental Protection Agency (FEPA), the agency designated as the national focal point for the Secretariat of the Convention on Biological Diversity (SCBD). The Registrars Department was represented by Mr. Salihu Aliyu, the Acting Registrar of Trademarks, Patents and Designs; Mr. Maiwada M. Omar, Assistant Registrar; Mr. Shafiu Adamu Yauri, Assistant Registrar and Ms. Titi Dabiri; and FEPA was represented by Alhaji M.M. Umar, Director. Discussions at this meeting included the need for awareness-raising on the value of traditional knowledge, the contribution of the intellectual property system to the protection of such knowledge, the need for documentation of cultural heritage, the question of community ownership, the ethical issues raised by individuals or institutions being granted patents that should belong to communities, and the need for the development of working access and benefit-sharing mechanisms. A proposal was also made for a project on documenting of Traditional Knowledge in the West African Sub-region.

Lagos

On **Thursday, January 21,** the delegation met with the following representatives of the Nigerian Folklore Society (NFS): Dr. S.O. Williams, President; Dr. G.G. Darah, immediate past President; Messrs. Humphrey Bekaren and Kunle Filani and Mrs. Bisi Ogundiran, Treasurer. The NFS which was established in 1980, coordinates folklore studies with a view to encouraging research and promoting the effective dissemination of cultural knowledge in the country. The discussions centered on the definition and identification of folklore and traditional knowledge, the question of individual vs. communal ownership, mechanisms to govern usage, valorization of traditional knowledge and documentation. A project proposal for the effective documentation of expressions of folklore was presented to the Director General of WIPO through the delegation for consideration.

Following this meeting, the delegation, accompanied by Dr. Williams and Mrs. Ogundiran traveled to **Abeokuta, Ogun State** to attend meetings which had been arranged with the kind assistance and support of the NFS and the Director of Culture of the Ogun State Council for Arts and Culture.

Abeokuta

The first meeting in Abeokuta was with Dr. (Mrs.) Yemi Olanrewaju, Director of Culture, Council for Arts and Culture, Ogun State. The Council was established in 1998 to promote and preserve the arts and culture of Ogun State, a state which is considered to be a cultural center of excellence in Nigeria with its rich traditional history and wealth of prolific artists in the dramatic and creative arts. The discussions centered on the need to document the existing knowledge and to promote the use of the works to enable the artists to benefit from their creativity. A national documentation center for folklore was set up three years ago at the Council for this purpose.

Dr. Olanrewaju subsequently accompanied the delegation on a visit which she had arranged to the *Kemta-Itoku Adire* cottage industry, a cooperative recently set up by women from Abeokuta who are skilled in the traditional technique of "*tie and dye*" using locally made indigo dyes. The women expressed their concern about the rampant exploitation of their traditional knowledge which has had the effect of watering-down the traditional methods which have been handed down from past generations, as they are unable to compete with modern technological methods. They have therefore resorted to using synthetic dyes which are not only cheaper than the locally produced dyes but also less labor intensive, to enable them to keep their prices down. They were initially reluctant for their photographs to be taken due to past experiences where photographs have been taken of them under false pretences and the *tie and dye* designs on their clothes in the pictures have been subsequently reproduced commercially without their permission. Some of the women therefore wore simple modern clothes as a way of protecting their own designs from "visitors" for fear of exploitation. They were however willing to provide information on the technology as they now considered it too late to attempt to protect it. The meeting with the WIPO delegation was their first introduction to intellectual property rights and mechanisms for protecting their designs. They requested an awareness-raising program both for the owners of rights and users.

The final meeting of the delegation in Abeokuta took place at the University of Agriculture where they met with the Vice Chancellor, Professor Julius Okojie and Professor Adetoro. The University was established in 1987 to train experts in agriculture and to encourage research. The use of traditional dyes was identified as a key research issue, which brings traditional technology (which is widely held by the local people) in touch with modern technology. The delegation was briefed on some of the research work being carried out by the Botany and Chemistry Departments of the University on investigating sources of dyes from locally cultivated plants. Modern scientists are now seeking ways of improving this technology without replacing or undermining the traditional technology which is at the risk of being lost because it is so labor intensive. The University researchers work closely with the holders of traditional knowledge and hopes to retain them as resource persons in developing more advanced technology. Dr. Okojie expressed concerns as to the loss of traditional knowledge and the lack of awareness of the principles of intellectual property. He expressed a keen interest in cooperating with WIPO in organizing an awareness-raising seminar on the importance of traditional knowledge and the contribution of the intellectual property system to the protection of this knowledge. He strongly emphasized the obligation of states to ensure that holders of such knowledge can sustain a decent standard of living on the basis of their knowledge and works derived therefrom.

The delegation returned to Lagos that evening where they met briefly with Dr. Bankole Sodipo, Partner, and Mr. Femi Fajolu, Solicitor, both of the law firm of Chief G.O Sodipo & Co. before departing for Ghana that night.

Ghana (January 21 to 26, 1999)

The meetings in Ghana were organized with the kind assistance of the Copyright Office and the Registrar Generals' Department. The delegation was accompanied to all the meetings by a member of staff of one of the offices.

Accra

The first meeting on **Friday, January 22,** was with Nana Akuoku Sarpong, the Presidential Staffer for Chieftaincy Affairs and Chairman of the National Commission on Culture under which the Copyright Office operates. Mr. Bernard Bosumprah, Copyright Administrator was also present. The WIPO team introduced the purpose of the mission and Nana Sarpong expressed his pleasure at the recognition being given to the value of traditional knowledge and the exploration of avenues for its protection. He offered to introduce the delegation to the cultural wealth of the Ashanti region (where he is a paramount chief) to enable them to witness first-hand some of the traditions of the Ghanaian people. A visit was scheduled to Agogo, Ashanti region for Sunday, January 24.

This was followed by a meeting with the Registrar, Mrs. Elizabeth Owiredu-Gyampoh and Mr. Joseph Harlley of the Registrar Generals' Department where the benefits of protecting traditional knowledge in Ghana and the contribution of the intellectual property system to such protection were discussed.

The next meeting was at the Ministry of Environment, Science and Technology where the delegation met with Mr. Edwin Barnes, Director; Dr. Dwumfour and Mr. Larsey Mensah. The department is involved in the development of a legal framework on bioprospecting in cooperation with the Registrar Generals' Department and the Attorney Generals office. The discussion covered the following issues: the conflict between the CBD and intellectual property rights, the development of appropriate regulations on access to biological resources and benefit-sharing mechanisms, the need for regional cooperation to develop appropriate and common responses as knowledge and resources often exist across boundaries, the question of which should come first: documentation or protection, the suitability of the existing intellectual property system for the protection of such knowledge, the complexities and cost of patenting for holders of traditional knowledge, and the need for awareness-raising seminars for all stakeholders.

The delegation next met with Dr. E.N. Mensah, Director, Institutional Care Division, Ministry of Health. Dr. Mensah informed them of the auspiciousness of the WIPO mission given the fact that traditional medicine is increasingly being reaffirmed as the first choice for most people in developing countries coupled with a worldwide renaissance of its use. The Ministry of Health has thus instituted formal relationships with traditional medical practitioners, research institutions (including faculties of medicine and science in universities) with a view to sharing information, cooperating on projects to advance and promote the use of traditional medicine and facilitating clinical trials and toxicology tests for herbal medicines. He requested more information on patenting, assistance with drafting of contracts or agreements between the department and traditional healers (he envisages that the department will only play a catalytic role with the intention that the patents will belong to the individuals or groups of traditional healers), the lack of circumspection on the part of the healers as to the value of their knowledge as they readily give away information on the uses of the plants to "researchers" and "students", information on benefit-sharing and training for the scientists and holders of traditional knowledge on legal mechanisms for protecting their knowledge.

The final meeting that day was a roundtable with research experts from the Council for Scientific and Industrial Research (CSIR), which has thirteen institutes.

Present at the meeting were Professor Atteng Yeboa, Deputy Director General, Institute of Environment and Health; Professor Akwasi Ayensu, Deputy Director General, Institute of Industry and Natural Sciences; Dr. Kofi Owusu-Ansah, Director, Institute of Industrial Research (IIR), Mr. Emmanuel Sackey, Scientific Officer, IIR, Mr. Joseph Gogo, Director, Science and Technology Policy Research Institute (STEPRI), and Ms. Florence Ejei, Scientific Secretary. A background briefing on the CSIR was provided highlighting their work on traditional knowledge-related issues ranging from plant medicine to arts and crafts through traditional food processing and preservation methods to raw materials for natural dyes. They have also embarked on a documentation project. Documentation, the use of trade secrets, awareness-raising, training on the use of the patent system and possible ways of simplifying the disclosure requirements, and the provision of advice on development of regulations and legislation on access to biological resources were identified as key areas where WIPO could assist. The need for cooperation between government departments involved in these issues was also identified. Doubts were expressed as to the use of the formal IP system for the protection of traditional knowledge and for the protection of works which are already in the public domain or have been replaced by modern technology.

That night the delegation with Mr. Bosumprah, had a meeting over dinner with Mr. Kofi Barfi, of Kuapa Kokoo Limited, a cocoa purchasing company that has devised a system of benefit-sharing for their local suppliers.

Agogo

On **Sunday, January 24,** the delegation left for Agogo, four hours from Accra accompanied by Mr. Bosumprah where they met with Mr. Kwame Ayimadu, the copyright officer for the Kumasi office, who is from that region. They paid a visit to Nana Sarpong at his palace where he explained various traditional rules and practices governing issues such as succession, marriage and inheritance. They had the opportunity to witness a traditional meeting of the chiefs presided over by Nana Sarpong and a traditional ceremony with rituals and dances to consult the gods for guidance and direction.

Accra

On **Monday, January 25,** the first meeting was at the University of Legon where the delegation met with Professor Kwabena Nketia, Director of the International Center for African Music and Dance (ICAMD). The objectives of the center are: training and presentation of performers, promotion of creativity and performance, research, systematization, documentation and dissemination of knowledge of African music and dance. He was encouraged by the fact that the importance of the protection of traditional knowledge (which he says is usually the basis of creativity in many contemporary works) is now being recognized. He emphasized the importance of documentation as a first step for such protection, constituting evidence of what knowledge exists; the need to acknowledge collective ownership, clarification as to the ownership issue *vis-à-vis* custodianship as traditionally some people are designated as custodians without necessarily having any right of ownership. He stressed the importance of agreeing on a working definition which appropriately describes and recognizes the cultural aspects of traditional knowledge, suggesting that the phrase "traditional culture and oral tradition" replace "folklore".

He advised that the initiative for documentation should be taken by each country if they value their cultural heritage, recognizing that documentation does not automatically lead to protection. He stressed the increased contemporary relevance of traditional knowledge which leads to increased interest and exploitation and highlights the importance of developing both conservation, protection and promotion mechanisms, to ensure that this knowledge remains in its original form but can be modified and used in other forms. To sum up, the discussions covered issues relating to ownership, usage, access and benefit-sharing, documentation and promotion, and the need to ensure that calls for protection do not stifle creativity. He also suggested that WIPO could assist by initiating pilot projects in different countries covering this range of issues to test the efficacy and relevance of the intellectual property system to the protection of such knowledge and derivative works.

The next meeting was with Professor Asiedu Yirenkyi, the head of the department of theatre arts (drama) at the University and Chairman of the National Folklore Board (NFB). Professor Yirenkyi explained the role of the Folklore Board and the attempt by the Government to link academia with more practical experiences. In both his capacities as an academic and the head of the NFB, he recognized the need to share knowledge and the contribution which Africa is making in this area to the development of the worldwide repertoire of contemporary creative and visual arts. He stressed that this cooperation should however not be done at the expense of the first source of this knowledge, the owners. He also called for training and awareness-raising programs on the value of this knowledge and methods of protection.

The delegation concluded its activities in Ghana with a roundtable at the Center for Scientific Research into Plant Medicine (CSRPM) in Mampong. Representing the Center were Professor K. Oppong-Boachie, Director; Dr. Archie Sittie, Acting Deputy Director; Mr. Osarfun Mensah, Head of Pharmacology; Mr. E.E. Mensah, Head of Microbiology; Mr. Yaw Amayaw, Scientific Information Officer and Messrs. Abraham Quarcoo, Frederick Aboagye, W. Ofosuhene-Djan, Michael Assuah and George Antepim, all Research Officers. The following traditional healers were also present: Messrs. Joseph Atiaku, Ransford Atiaku and Djam Atiaku of Alafia Bitters and Dr. G.K. Noamesi. The delegation was requested to point out that these herbalists were in no way representative of all the herbalists in the country and were participating in the meeting in their personal capacities. Professor Oppong-Boachie provided some background for the meeting by giving an overview of a WIPO mission which had been undertaken to the center in May 1998 at the request of the Government to advise the Center on the possibilities for the protection of their research results. One of the recommendations of the mission was that CSRPM should request state-of-the-art searches to evaluate the Center's research results and to provide a basis for decisions regarding the filing of patent applications to seek protection for these results. The delegation was informed that 7 such searches had been carried out since the 1998 mission. Matters discussed included the need for training on the use of the patent system for both the herbalists and the staff of the Center, the complexities and cost of patenting, the need for the development of an association of herbalists to collectively address the problems of exploitation, and the need to develop some formal relationship with the herbalists to ensure that they also share in whatever benefits that may accrue from successful research using their preparations.

The delegation left Ghana for Mali on January 26.

Mali (February 26 to 29, 1999)

Bamako

During the stay in Mali, the meetings held by the WIPO delegation were organized and coordinated by the National Directorate for Industry (DNI) and by the Copyright Office of Mali (BUMDA), and particularly by Mr. Adama Konaté, Director of DNI, and Mr. Sidibé Mamadou, Secretary General of BUMDA. At the request of the delegation, meetings were organized by DNI with other resource persons. Throughout its stay in Mali, the delegation was accompanied on its visits by either an official of DNI, particularly by Mrs. Konaté or by an official of BUMDA.

On arrival in Bamako on the afternoon of **Monday, January 26**, the delegation met with Mr. Adama Konaté, Director of DNI. During the meeting, the delegation reiterated the aims of the FFM and its terms of reference, emphasizing that its job was to collect information on the protection of traditional knowledge in Mali.

These initial contacts were followed by a meeting with Mr. Madani Traoré, a traditional medical practitioner who had come especially from Kayes (450 km from Bamako) to meet with the WIPO delegation. Discussions focused on the ways in which knowledge of traditional medicine was acquired and on the properties of the medicinal products thus obtained. Mr. Traoré acknowledged the need for and importance of protection of traditional medicinal knowledge and deplored the lack of recognition of its value as well as the disregard in which traditional practitioners were held in the country. He emphasized that protection under the intellectual property system, though adequate, was expensive and little known but a lack of protection facilitated the exploitation of traditional knowledge held by the traditional practitioners without acknowledging their source and without compensation. Mr. Traoré also stressed the need for a campaign to make the traditional practitioners of Mali aware of their rights and of the means of protecting their knowledge. It should also be mentioned that Mr. Traoré holds two patents issued by the African Intellectual Property Organization (OAPI). Mrs. Konaté served as an interpreter throughout these discussions.

On Wednesday, January 27, the WIPO Delegation had meetings with the National Directorate of Arts and Culture at the Ministry of Culture and Tourism, the National Directorate for Conservation of Nature at the Ministry of the Environment, and the Mali Association for the Promotion of Research and Technological Innovation (AMPRIT).

The discussions, in which Dr. Téréba Togola, National Director of Arts and Culture, and his senior staff participated, concerned matters related to the definition of the concept of traditional knowledge. In that respect, special emphasis was placed by the participants at the meeting on the relationship between folklore and traditional knowledge, and the importance of such knowledge in the process of technological innovation for the economic and cultural development of African countries. As far as protection of such knowledge was concerned, the participants first identified the absence or inadequacy of the instruments of protection in Mali, apart from folklore which was protected by copyright law, before presenting their views on a possible approach to the matter; the approach could be (i) to identify and document the various fields involved in traditional knowledge, (ii) to find the legal concepts that could be applied (customary law and/or modern law) and (iii) to inform and raise awareness among the holders of traditional knowledge of the rights they may possess. The participants complained of the lack of unity among the institutions responsible for matters relating to traditional knowledge in Mali (several Ministerial departments dealing with the various fields) and suggested that an Inter-ministerial Committee be set up to be responsible for coordinating the activities of those institutions.

At the National Directorate of Nature Conservation (DNAER), the delegation met with Mr. Yaya Tamboura, Director, and Mr. Bourama Niagate, Water and Forestry Engineer. During the meeting, they explained to the delegation the objectives of DNAER which include the planning, safeguard and management of the forests, fauna and the terrain of the country. After listening to the delegation explain the aims of its mission, they acknowledged the importance of the traditional technologies developed by local communities within the framework of their objectives, and stressed the need to valorize such technologies.

Mr. Seydounour Diallo, President of AMPRIT, received the WIPO delegation together with Mr. Fousseyni Touré, Secretary General, and Mrs. Konaté in her capacity as a member of that association. The delegation emphasized the need for the members of the association (which had recently been set up) to take into account in its activities the needs, rights and expectations of the holders of traditional knowledge and of innovations in the field of intellectual property. In that respect, the participants spoke of the difficulties that had arisen when the National Directorate of Industry (DNI) had wished to protect *bogolan* – a well-known traditional technique for dyeing textiles - by means of industrial property.

On Thursday, January 28, the WIPO delegation was received at the Institute of Rural Economy (IER) where it met with Dr. Modibo Sidibé, Assistant Director General, Mr. Abdoul Y. Maiga, planner-teledetector, and Dr. Abdoul K. Traoré, Director of the Regional Center for Agronomic Research in Sotuba. This Institute is part of a sub-regional network for agronomic research; the network comprises organizations such as the Inter-African Committee for the fight against drought in the Sahel (CILSS) based in Ouagadougou (Burkina Faso) and the Research Center for Agro-Forestry (ICRAF) based in Bamako and which enjoys the support of the World Bank for the development of its research results.

During the meeting, discussions centered on the possibilities for technological innovation based on the traditional knowledge of local peoples with respect to agronomy and biotechnology (mainly in the field of conservation of biological resources), the important research results of the Institute in that field, the relations between research workers of the Institute and the holders of traditional knowledge, and the need to explore ways and means of protecting not only traditional knowledge and its holders, but also the innovations that derive therefrom. The problems involved in regulating access to biological resources were also touched upon.

On the same day, the WIPO delegation met with Mr. Arouna Keita, Professor at the Faculty of Medicine, Pharmacy and Odonto-Stomatology of the University of Bamako, and Head of the Department of Traditional Medicine at the National Public Health Research Institute (INRSP). Professor Keita is a member of the Interministerial Committee for the implementation of the Biodiversity Convention and is Coordinator for the African and Malagasy Council of Higher Education (CAMES), comprising 16 countries, for the traditional medicine program.

During the discussions, Professor Keita expressed his concern at the various difficulties faced by researchers and traditional practitioners with regard to the intellectual property protection of traditional medicine, such as the "leakage of the results of research" to foreign pharmaceutical firms due to the lack of incentives for research, financial resources, development infrastructure and the absence of regulations on prospecting and access to biological and genetic resources. He stressed the synergy between conventional (modern) medicine and traditional medicine, the need to involve the holders of traditional knowledge in all stages of research and of the clinical tests of products as well as in equitable sharing of the benefits from such research.

Professor Keita considered that the intellectual property system could play an important part in the protection of traditional knowledge and, to that end, stressed the importance of documentation of resources and knowledge at the national level, the need to form associations of traditional practitioners and the organization by WIPO of information and awareness-raising sessions for those practitioners, as initial steps towards recognition and protection for such knowledge and for its holders.

The delegation also visited the "Sunsun" workshop of the painter Mr. Abou Wologem with whom it discussed the use of the *bogolan* technique in modern art.

In the afternoon, the WIPO representatives held talks with Mr. Mahmoud Bamba, President of the Cultural Movement for Development (N'KO Group) together with his principal staff members. During the meeting, a presentation was made of the N'KO alphabet that uses signs of varying origins. Mr. Bamba expressed his concern at the "pillaging" of traditional knowledge of which the holders of traditional knowledge were victim, particularly with respect to traditional medicine, and expressed his wish that means of protection be found that would take into account the expectations of such holders. In that respect, he emphasized the forms of protection that were enjoyed by such persons in the traditional pre-colonial societies.

On **Friday, January 29**, the WIPO delegation had two appointments. The first was at the headquarters of DNI, with three representatives of the Ginna Dogon Association for the protection and promotion of Dogon culture in Bamako, presided over by Mr. Ambadio Kassogué. The people with whom the delegation met discussed the importance of the traditional practices and knowledge of the Dogon communities, particularly with regard to conservation of biological resources, eco-systems, technology, including biotechnology and traditional medicine. They were concerned at the spate of incorrect and frequently distorted studies made in relation to the cultural principles, practices and the knowledge of their communities.

During the meeting, questions were raised on the lack of consideration and absence of protection for such knowledge and practices. The notions of ownership of property of such knowledge in the traditional societies were discussed and compared with the modern notion of property, particularly with regard to intellectual property law. The mercantile concerns that frequently underlie the exploitation of such knowledge without financial compensation to the holders of the knowledge were also raised. The representatives of the association also expressed reservations as to the possibility of effectively protecting traditional knowledge due to the fact that it most frequently belonged to the public domain.

The delegation completed its stay in Mali with a visit to the textile-dyeing workshop of Mrs. Sy Awa Ly.

Senegal (January 30 to February 2, 1999)

During its stay in Senegal, the meetings in which the WIPO delegation participated were organized and coordinated by the Senegalese Copyright Office (BSDA) and the Industrial Property and Technology Service (SPIT) of the Ministry of Industry and Mines. Throughout its stay, the delegation was accompanied to its meetings by Mrs. Marie Mody Sagna, Secretary General of BSDA, and Mr. Amadou Moctar Dieng, Head of SPIT.

Dakar

The delegation arrived in Dakar late on **Friday, January 29, 1999**, and had its first meeting at Rufisque (30 kms from Dakar) on **Saturday, January 30** with Mr. Jean Ormond Ndiaye, phytotherapist, with traditional therapists from the traditional hospital in Keur Massar (45 kms from Dakar) and with Mr. El Hadj Daouda Seck in Bargny (40 kms from Dakar) who runs a center for the traditional treatment of psychiatric problems.

The experiments with traditional medicine, conducted by Mr. Ndiaye since 1974, make use of recipes and prescriptions based on a semi-scientific and empirical exploitation of the medicinal plants in various eco-systems of Senegal and of the West African Sub-region. Mr. Ndiaye, who has paid a number of visits to Europe as part of his activities as a traditional practitioner, works together witn researchers and with the Faculty of Medicine of the University of Dakar which runs clinical tests on the medicines which he develops. Mr. Ndiaye's concerns were essentially the deterioration and disappearance of the biological resources of his country, the transmission of his knowledge to his children and means for improving his research. The delegation noted that he was totally unaware of intellectual property protection and very willing to divulge his knowledge to modern scientific researchers. He emphasized the efforts that should be made by national authorities to group traditional practitioners together in associations and on the launching of an information campaign in the field of intellectual property for them.

At Keur Massar, the WIPO delegation was received by a group of traditional practitioners composed of Mr. Mamadou Sambo Diaw, Mr. Abdoulay Fati, Mr. Amedou Ba and Mr. Djibril Ba.

The hospital was established by Mrs. Ivette Paresse, former Professor at the University of Dakar, and it is involved with the funding of activities and the use of traditional medicinal knowledge. During the discussions, the practitioners focused on the exclusiveness of the knowledge which they held and their fear of divulging it due to the "pirate" exploitation by modern laboratories to which they could be subject. After having listened to the objectives of the delegation as to the assessment of the needs for protection of the holders of traditional knowledge, the practitioners referred to the various seminars on the protection of traditional medicine in which they had participated and their willingness to cooperate with modern medicine, subject to adequate guarantees. They recommended the implementation of a law that would recognize traditional medicine and set out the framework for collaboration between traditional practitioners and modern medicinal practitioners. They also informed the delegation that a patent had been filed in France based on the results of their knowledge.

During a brief discussion at Bargny (center for the traditional treatment of psychiatric problems), Mr. Daouda Seck informed the delegation the "mystical" nature of his knowledge, of the impossibility of disclosing it or of obtaining it, and of the exclusive nature of the property he held in it. In reply to a question on possible cooperation between traditional medicinal practitioners and modern medicinal practitioners, Mr. Seck expressed some skepticism, apart from the case of collaboration *intuitu personae* with persons in whom he would have full confidence and could guarantee him a share in the financial benefits derived from using his knowledge.

Fatik

On Sunday, January 31, the delegation traveled to Fatik (155 kms from Dakar) to visit the Center for the Promotion of Traditional Medicine (PROMETRA) where it had discussions with Mrs. Sarah Sagna, President, and Dr. Erick V.A. Gbodossou, promoter of the center; and 60 members of the association.

The aims of the center are to ensure the future of traditional knowledge with regard to medicine, conservation of biological resources and the promotion of traditional healers through collaboration between traditional knowledge, modern technology and modern medicine. The Center forms part of a larger and more complex network with links to research and funding institutes based in the United States and in Europe.

The first concern raised by the participants at the meeting was that traditional pharmacopoeia are not sufficiently recognized in their country of origin, in the same way as modern medicines. They stressed the fact that, despite the freedom afforded to the traditional practitioners working at the Center, most of them were reticent towards the idea of divulging their knowledge. The participants stressed their lack of knowledge of the intellectual property protection system and expressed their belief that the system would be financially inaccessible to them. By keeping the nature of the biological resources and the biotechnological processes involved in the development of their products a secret, they felt able to protect themselves against any threat to their knowledge.

It has to be emphasized that the participants were extremely aware of the value and importance of biological diversity as a source of wealth for the developing countries. They
stressed the need for appropriate solutions in order to protect knowledge in the field of traditional medicine and considered that WIPO should play a more important role in that field.

In the discussion on matters of acquisition of property and transmission of traditional knowledge, the participants explained that these were frequently acquired via the family heritage (from the father or the mother), that property was individual and that in some cases extended to the nucleus of the family and that the transmission (transfer) of that knowledge occurred in the same way as the acquisition.

On Monday, February 1, the WIPO delegation visited two institutions: the Fundamental Institute for Black Africa (IFAN) at the Cheick Anta Diop University and the non-governmental organization ENDA.

At the IFAN, the delegation met Dr. Hamady Bocoum, Head of the Department of Human Sciences. IFAN was founded in 1935 with the objective of studying and collecting information on the plant resources of the West African sub-region, studying the properties of these plants and collating information on the traditional technologies developed by the peoples of the region. In that respect, research has been conducted in the areas of traditional pharmacopoeia and medicine, traditional methods of animal husbandry, fishing and traditional metallurgical technology, as well as traditional artistic techniques.

Dr. Bocoum highlighted the potential of traditional knowledge in terms of research, application and development for the African countries in particular. Speaking of a possible system of protection, he considered that traditional knowledge would not be open to individual appropriation. According to him, each trade (for example traditional medicinal practitioners, metal workers and farmers) would have to own a collective property right. In his view, a system of protection for traditional knowledge would have to depart from the principles of intellectual property and be set up at the national level to begin with, through (i) improved consultation with holders of traditional knowledge, (ii) systematic collection of knowledge (documentation), (iii) devising legal norms agreed by all and which employs both the concepts of customary law and modern law.

During the talks that the delegation held with the non-governmental organization ENDA, represented by Mr. Raphael Ndiaye, it clearly emerged that ENDA was very interested in traditional knowledge and in the holders of that knowledge, by applying an approach known as research-action. That approach enabled ENDA to undertake the collection, from holders of knowledge concerning traditional medicine, the properties of plant varieties, traditional technologies for conserving soils and foodstuff, and knowledge linked to biotechnology. ENDA then exploited the results it obtained, he explained, which were a source of innovation and discovery capable of patenting due to the means of development available to the developed countries.

Mr. Ndiaye acknowledged the difficulties encountered by ENDA in applying the principles of intellectual property protection to the results obtained and with respect to the rights which the holders of knowledge could claim as individual or collective owners. In its relationships with these holders, ENDA considered that concepts of individual ownership of knowledge would be difficult to apply especially as regards the use and sharing of the benefits generated by the research-action approach. Confronted with that situation, ENDA dealt with the holders as service providers whose remuneration was determined by negotiation.

Just as Dr. Bocoum of IFAN, Mr. Ndiaye considered that the implementation of adequate protection for holders would involve the identification, registration and experimentation of the traditional knowledge.

On Tuesday, February 2, the delegation met at the Ministry of Environment, Mr. Pathé Baldé, economist-environmentalist, Mr. Ibrahim Sow, engineer-environmentalist, Mr. Ernest Dione, biologist-environmentalist, and Mr. Elimane Ba, geographer-environmentalist.

During that meeting, the delegation introduced the terms of reference of the mission relating to those aspects connected with the implementation of the Biodiversity Convention. Following the introduction, the officials focused on the need to coordinate national activities for the implementation of the CBD in view of the diversity of national structures concerned.

In the afternoon, the delegation was received at the headquarters of PROMETRA by Dr. Erick Gbodossou. At the meeting they were able to return in more detail to the numerous activities, the organization, assistance and partnership network of this NGO.

The discussions also permitted Dr. Gbodossou to set out the highly encouraging practical results achieved by PROMETRA with regard to the exploitation of traditional knowledge in the treatment of certain illnesses. The meeting also enabled him to express his views on what he considered the inadequacy and inappropriateness of the intellectual property protection system with regard to the needs of the holders of traditional knowledge confronted with the "pillaging" of this knowledge by large research and development structures in the industrialized countries due to a lack of regulations on access to biodiversity resources. He reiterated the expectations he had of WIPO towards a solution to these problems.

Dr. Gbodossou explained to the delegation his "theory of the symbolism and concept of man in traditional African thinking" (highly complex, metaphysical and philosophical). His view was that a greater comprehension of that theory would contribute to finding concepts applicable to the protection of the rights of the holders of traditional knowledge.

The WIPO delegation completed its mission to Senegal with a meeting at the headquarters of the Council of Development Support NGOs (CONGAD); Mrs. Awa Sow Wade, Mr. Ely Sy, Mr. Salah Eddine Sy, Mr. Amath Dior Mbaye, all representing NGO's who are members of CONGAD, were present. This final meeting enabled the delegation to discuss with the participants the relations between their NGO's and the holders of traditional knowledge. Questions relating to the nature, scope and implementation of the Biodiversity Convention were also touched upon. The participants stressed their lack of knowledge of the system of intellectual property protection and expressed a wish that WIPO and the Senegalese structures responsible for such matters (BSDA and SPIT) undertake information dissemination and awareness-raising activities for the NGO's and the holders of such knowledge. Such an awareness campaign would be necessary to clarify and improve the relations between the NGO's and such holders in the use of traditional knowledge for purposes of technological innovation.

The delegation left Senegal for Geneva that evening.

Fact-Finding Mission 7

Arab Countries
February 27 to March 13, 1999

The mission was conducted by Messrs. Victor Nabhan, Consultant, Cooperation for Development Bureau for Arab countries and Shakeel Bhatti, Program Officer, of the Global Intellectual Property Issues Division of WIPO.

Sultanate of Oman (February 27 to March 1, 1999)

WIPO's meetings and activities in Oman were kindly coordinated and organized by the International Organizations Department of the Ministry of Commerce and Industry, principally by Mr. Jabar Bin Marhoon Fleifil Al-Wahaiby, Director General, International Organizations Department.

Muscat

On **Saturday, February 27,** the WIPO mission visited the Ministry of National Heritage and Culture and held discussions with Dr. Sulaiman bin Seif Al-Hashimi, Director of Handicrafts, and Dr. Ali Al-Shanfar, Director, Ministry of National Heritage and Culture, on the National Heritage Protection Law of the Sultanate of Oman (Royal Decree No.6/80) and the work of the Ministry for the promotion of traditional handicrafts, including pottery and traditional textile designs, and the protection of national heritage. The mission was accompanied by Mr. Khalfan bin Said Al-Rahby, Ministry of Commerce and Industry.

The mission then held discussions at the Oman Center of Traditional Music, Ministry of Information, with Dr. Khalfan Ahmed Abdullah Al-Barwani, Director, Mr. Musalim Al-Kathiry, Technical Researcher, and Mr. Ali bin Saleh Al-Qazali, Technical Assistant. The Oman Center of Traditional Music was established in 1983 by His Majesty Qaboos bin Said, the Sultan of Oman to document, conserve and promote traditional Omani music and the Center has since documented more than 80% of Oman's musical traditions. The Center houses extensive archives of sound recordings, audio-visual recordings, and photographs of Omani expressions of folklore, as well as highly modern database systems to manage the compiled information. Discussions focused on methods for the documentation and preservation of musical works; provisions for the protection of expressions of folklore in the Copyright Act of Oman; questions of authorship and exercise of copyright; an International Symposium of Traditional Music of Oman, held by the Center in 1985 which produced 3 volumes of publications on Traditional Music of Oman; and performers' rights in relation to the implementation of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

Barka

On **Sunday, February 28,** the WIPO mission visited the Department of Plant Production Research, Directorate General of Agricultural Research, Ministry of Agriculture and Fisheries, and held discussions on traditional knowledge and practices in Omani agriculture with Mr. Ali Hussein Al-Lawati, Director, Mr. Said Khalfan Al-Naomani and Mr. Majid Al-Maameri, Department of Plant Production Research, Directorate General of Agricultural Research, Ministry of Agriculture and Fisheries. Discussions focused on traditional knowledge and practices in Omani agriculture, specifically the *Aflaj* systems of irrigation. The mission then proceeded to Barka and met with Mr. Khalfan Al-Naomani, traditional healer, and held discussions with him, Mr. Ali Hussein Al-Lawati and Mr. Said Khalfan Al-Naomani. Topics included questions of intellectual property and the commercialization of traditional medicine, the documentation of traditional medicinal knowledge in the Dhofar province of Oman; the collective innovation processes in family-based research on medicinal plants. The mission then visited the Oman

283

Room of the Sultan Qaboos University Library and reviewed literature that had been written on intellectual property, biodiversity conservation and traditional medicinal knowledge in Oman.

Muscat

On **Monday, March 1,** the WIPO mission visited the Traditional Medicine Clinic, Diwan of Royal Court, Muscat. The Traditional Medicine Clinic was established by His Majesty Sultan Qaboos ibn Said in 1988 in order to conserve the national heritage of Oman in the field of traditional medicine and traditional treatments. The Clinic employs six traditional healers and treats about 25 to 35 patients daily with traditional plant medicines. The Clinic maintains two stations, one in Muscat and one in Salalah and provides its services free of charge to Omanis and foreigners. The traditional healers working at the Clinic specialize in different medical fields, practice respectively in their fields and keep their knowledge of these fields as trade secrets. Discussions were held with Sheikh Ali ibn Hilal Al-Khalili, Deputy Director General, Mr. Mohammed Salim Ahmed Al-Sawafi, Head of Clinic, the following traditional healers: Dr. Nasr Hilal Khamis Al-Dawiani, Mr. Ahmed Ali Al-Abri, Mr. Mohammed Al-Kindi, Mr. Jakub Nasr Al-Suleimi, Mr. Said Salim Al-Khanbashi, Mr. Said Rashid Al-Dhoori, and Mr. Hamid Salim Rashid, and Mr. Khalfan bin Said Al-Rahby, Ministry of Commerce and Industry. Discussions focused on the practices of traditional medicine in the Sultanate of Oman, the possible use of trade secrets for the protection of such knowledge, the need to study intellectual property as a possible incentive to encourage the use and disclosure of traditional medicinal knowledge and the forging of connections with modern medicine; the potential of intellectual property as a means to stimulate the local and national production of traditional medicines and indigenous medicinal plants; intellectual property as a possible means to encourage international cooperation, exchange and transfer of traditional medicine internationally and between individual healers; increased training needs on traditional medicine and intellectual property for the young similar to training available on modern medicine; the need for training on intellectual property aspects of traditional medicine through study visits and through inclusion of such topics existing WIPO seminars.

State of Qatar (March 2 to 7, 1999)

WIPO's meetings and activities in the State of Qatar were kindly facilitated and coordinated by the Copyright Office of Qatar in the Ministry of Finance, Economy and Commerce, principally by Mr. Abdallah Qayed, Head of the Copyright Office.

Doha

On **Tuesday, March 2,** the WIPO mission visited the Gulf Cooperation Council (GCC) Folklore Center (the Center). The Center was established in 1982 at the recommendation of the 6th meeting of the ministers of information of the Arab Gulf States, with the objectives of collection, documentation, classification of expressions of folklore in the GCC member states; publication of studies on Arab Gulf folklore; protection of Gulf folklore from misuse and illicit exploitation, and preservation of the rights of GCC member states in this respect; awareness-raising about the importance of folklore; establishment of a central information section and databases of folklore for use by scholars. The mission held discussions with officials of the Center, including Dr. Abdul Rahman Manai, Director General; Ms. Amna Rashid J. Al-Hamdan, Head, Projects and Fieldwork Studies Section, and Dr. Ismail Al-Fahil, folklore expert, and Mr. Abdallah Qayed. Discussions focused on the work of the Center in the past 17 years, which includes documentation projects about material culture; arts and crafts, specifically traditional pottery, architecture, costume and jewelry designs; folk customs, traditions and beliefs; traditional folk medicines, specifically folk medicine for mother and child illnesses, cauterization and cupping; folk music and dance, specifically vocal and choreographic traditions in the Arab Gulf. Intellectual property issues raised during the discussions included the need to protect traditional *sadu* (wool weaving) designs from being reproduced abroad; and the protection of databases of expressions of folklore.

The mission also visited the Ministry of Finance, Economy and Commerce, where it met with Dr. Abdel Aziz Yusef Al-Khalaifi, Director, and Mr. Qayed. Topics covered during discussions included the implementation of the TRIPS Agreement, the work of the United Nations Education, Scientific and Cultural Organization (UNESCO) on expressions of folklore, and copyright enforcement in the State of Qatar.

On **Wednesday, March 3,** the mission continued its discussions at the GCC Folklore Center with Ms. Al-Hamdan, Mr. Shawqi Osman, Head, Technical Executive Unit, Mr. Faraj Labieb, Head, Recording Unit, Mr. Abdul Aziz Mutawah, Field Collector, and Mr. Mohammed Abbas, Field Collector, Field Collection Unit, all of the Projects and Fieldwork Studies Section. Discussions focused on technical aspects of the documentation work undertaken by the Projects and Fieldwork Studies Section of the Center; methods of conservation and preservation of expressions of folklore in the holdings of the Center; the 1982 UNESCO-WIPO Model Provisions for National Laws on the Protection of Expressions of Folklore from Illicit Exploitation and Other Prejudicial Actions and their possible implementation in national legislation among GCC member states; IP aspects of licensing contracts for parties requesting access to the holdings of the Center; copyright issues related to photographs archived by the Center; the relation of expressions of folklore to the public domain; rights of broadcasters in relation to the broadcasting of audiovisual fixations of performances which constitute expressions of folklore. Subsequently, the mission also visited the Qatar National Museum, which exhibits some of the documentation work on Qatari folklore produced by the Center.

On **Thursday, March 4,** the mission held further discussions at the Center with Ms. Al-Hamdan, Mr. Osman, Mr. Labieb, and Mr. Mutawah, focusing primarily on the intellectual property needs of the Center, including the need for intellectual property training for staff members of the Center; awareness-raising activities on intellectual property among the GCC member states; development of licensing agreements for the expressions of folklore that are in the holdings of the Center; the development of legal means for the protection of expressions of folklore in GCC member states; studies on the intellectual property aspects and implications of the documentation, classification and registration of expressions of folklore.

On **Saturday, March 6,** the mission met at the Center with Mr. Osman and Mr. Ali Al-Mohannadi, designer and artist, and discussed the protection of tradition-based designs for jewelry and fashion products, produced in Qatar and marketed abroad. From the Center the mission had a telephone discussion with Ms. Aisha Matar, Director, Crafts Center, Manama, Bahrain. The work of the Center includes textiles, wool weaving, palm leave production, stained glass, jewelry, and embroidery projects. Discussions focused on the history of the Crafts Center and its projects; the connection between traditional handicrafts, modernization and innovation; trade secrets in relation to the know-how of the Center's handicrafts projects; patent protection and state-of-the-art searches regarding the production of palm leave paper. The mission then had a meeting with Ms. Al-Hamdan and Mr. Ismail.

Arab Republic of Egypt (March 8 to 10, 1999)

The meetings of the mission in Egypt were kindly facilitated by Mr. Houssam Loutfi, Professor of Civil Law, Beni Sweif University, Cairo. Extensive and valuable support was provided by Ms. Amira Khalifa, Senior Program Officer, Information and Decision Support Center, Cairo, who accompanied the WIPO delegation to many of its meetings.

Cairo

On **Monday, March 8,** the mission visited the workshops and production sites of numerous traditional artisans, including the Saleh Carpet Factory, Mr. Hassan Bulbul, merchant for traditional arts and handicrafts, Mr. Saleh Nouh, mother of pearl and woodwork artisan, Mr. Haji Sayyid, metalwork artisan, Mr. Hassan Sunni, silverwork artisan, and Mr. Mohamed Mandour, potter. Issues discussed included the relationship between originality and tradition in tradition-based arts and handicrafts, the production methods of traditional arts and crafts, the moral right to claim authorship of craftsmen executing tradition-based designs developed by designers. The mission also visited the Bayt El Suhaymi Documentation, Restoration and Conservation Project, funded by the Arab Fund for Economic and Social Development. The mission discussed with the project managers, Dr. Asaad Nadim and Dr. Nawal El-Messiri, National Art Development Industries of Mashrabeya, issues related to preservation of cultural heritage, the relation between heritage preservation and social development, the erosion of traditional knowledge, arts and handicrafts, the relation between the conservation and commercialization of folklore, IPRs as possible incentive measures to prevent the loss and illicit exploitation of folkloric traditions.

On **Tuesday, March 9,** the mission visited the National Art Development Industries of Mashrabeya (NADIM) and met with Dr. Nadim, Dr. El-Messiri, and several traditional artists and artisans working in the enterprise. NADIM was created in 1978 with the objective of creating a young generation of Egyptian artists who know about Egyptian folklore and traditional arts and crafts. It started with four traditional artists and today employs 400 traditionally trained artists and artisans. NADIM's work includes traditional brasswork, metal, tent-making techniques, carpets, upholstry and bookbinding. NADIM is a financially self-supporting enterprise. At NADIM the mission was joined by Ms. Amira Khalifa. The visit included a tour of the premises and production facilities of the National Art Development Industries of Mashrabeya and discussions with Dr. Nadim and Dr. El-Messiri. These discussions focused on the history and philosophy of NADIM, the concept of derivative works in relation to expressions of folklore, incentive measures to promote traditional arts and handicrafts, training for traditional artists, oral folkloric expressions in relation to performers rights, and industrial designs in relation to traditional carpet designs.

On **Wednesday, March 10,** the mission was accompanied by Ms. Amira Khalifa to the "Cainet 99. The 4th Internet Conference and Exhibition", which was jointly organized by the Regional Information Technology and Software Engineering Center, the Regional Information Technology Institute, and the Cabinet Information and Decision Support Center. At the conference venue, the mission held discussions with Dr. Aleya Hussein, Professor of Anthropology, Cairo University, and Dr. Abdel Hameed, former Director of the Center of Folklore Studies on topics including documentation projects for traditional designs, handicrafts and medicines in oases of Western Egypt; the work of the Folklore Studies Center, including departmental work on mass culture, expressions of folklore, Arabic language, and the production of an Atlas of Folklore; the work of the Committee on Folklore/Folk Arts under the Higher Council of Culture, which includes 28 experts in various fields of folklore; the work of non-governmental and private institutions focusing on traditional literature and Arab folklore; the need for protection of folklore in Egypt, as exemplified in the traditional art in Upper Egypt of weaving the "*tulli*".

Subsequently, the mission met with Dr. Ahmed Aly Morsi, Professor of Egyptian and Arabic Folklore, Cairo University, Dr. Farouq Khourshid, and Dr. Shawki Abdel Kawi Habib, Director, Center for Folkloric Studies, Cairo. Topics of discussion included work undertaken by the Ministry of Culture under the Higher Council of Culture; the proposal to create a non-governmental Institute of Folklore, which would teach folklore studies; the commercialization of traditional Egyptian arts for tourism and its effects on the conservation of folkloric traditions; the need for legal protection of Egyptian folklore from illicit commercialization and other prejudicial actions; entitled the possibilities of creating a non-governmental "Society for Promoting and Protecting Traditional Arts" to improve the exercise of such rights granted under such possible legislation; practical steps in conserving Egyptian folklore: to gather and document traditional materials; to provide a framework for the identification and classification of traditional art, while giving contemporary artists the liberty to build upon traditions; the need for such a framework not to be rigid and for there to be flexibility within such a framework of protection; mention was made of the example of the *kelim*, where artists build upon traditional designs by introducing new colors, thus producing original and protectable works; the need to teach folklore at educational institutions and to create opportunities for the practice of folkloric traditions.

State of Tunisia (March 11 to 13, 1999)

WIPO's meetings and activities in Tunisia were kindly facilitated and coordinated by the different departments of the Ministry of Culture. Support was also provided by La Phonothèque Nationale Tunisienne, Centre des Musiques Arabes et Méditerranéennes, "Ennejma Ezzahra", Maison du Baron d'Erlanger, principally by Mr. Hatem Touil, Director.

Tunis

On **Thursday, March 11,** the WIPO mission visited the « Organisme Tunisien de la Protection des Droits d'Auteurs » (OTPDA), of the Ministry of Culture, and held discussions with Mr. Khaireddine Abdel Al, Director General, Mr. Mohammed Salah Djebbi, Secretary General, OTPDA, and Mr. Hatem Touil. The mission was accompanied by Mrs. Latifa Mokaddèm, from the Cabinet of the Ministry of Culture.

Discussions were held on the means of protection and preservation of the integrity of folklore by regulating its commercial exploitation under Article 7 of the Tunisian Copyright Act (Law no.94-36 of February 24 1994). Discussions stressed the main aspects and difficulties of implementing this Article. Discussions were also held on the necessity and proper ways of protecting folklore on the international level (through copyright legislation or by a *sui generis* protection under an international treaty). Also emphasis was put on the new role of the OPTDA in the implementation of the Tunisian Copyright Law.

A meeting was later held on the premises of the Center of Arab and Mediterranean Music « Ennejma Ezzahra », with the participation of Mr. Khaireddine Abdel Al, Director General of the OTPDA, Mr. Djebbi, Mrs. Latifa Mokaddèm, and Mr. Hatem Touil. His Excellency Mr. Zine El Abdine Ben Ali, President of the Republic of Tunisia, established the Center in 1971 to document, conserve and promote traditional Tunisian music. Discussions focused on methods for the documentation and preservation of musical works. The Center also organizes concerts, holds exhibitions on traditional musical instruments, hosts seminars on traditional music and provides facilities for researchers. It also houses a workshop for the restoration of old musical instruments.

On **Friday, March 12,** the WIPO mission visited the « Institut National du Patrimoine », Directorate General of the Ministry of Culture, and held discussions with Mr. Boubaker Ben Fraj, Director General, Mrs. Bintawfous Aziza, Mrs. Benyounès Alia and Mr. Hafnawi Moariya, all researchers at the Directorate General. The Institute has been created by way of decree (no.93-1609, dated July 26, 1993). Its purpose is to establish an inventory of matters pertaining to heritage in the fields of culture, archaeology and history as well as to preserve and promote such heritage. Discussions focused on methods for performing its tasks. The Institute sponsors a review (Cahiers des Arts et Traditions Populaires) which publishes scholarly articles in the field. Discussions focused also on the "Code du Patrimoine", created by virtue of the Law no. 94-35 dated February 24, 1994. Its purpose is to protect historical and archaeological sites. It is administered by the National Heritage Commission (Commission Nationale du Patrimoine). Discussions also focused on other ways of preserving traditional crafts, through laws and regulations pertaining to quality control of the products (under the jurisdiction of the Ministry of Tourism and Traditional Crafts) or the competence of craftsmen (under the jurisdiction of the Ministry of Social Affairs).

On **Saturday, March 13,** the WIPO mission had discussions with Mr. Fethi Zghonda, Director of Music and Dance, at the Ministry of Culture. Discussions focused on the practical application of Article 7 of the Tunisian Copyright Act, and more particularly the criteria helping to define a folkloric musical work, as well as criteria used to assess whether its treatment (by commercial exploitation) is in conformity with the Law. Also discussions focused on the fact that since 1960, a systematic approach has led to the recording of almost 70 % of all traditional Malouf music, and that an endeavor to publish such music is underway (6 CD recordings have already been made).

Later His Excellency the Minister of Culture Dr. Hermassi Abdel Baki received the mission. The Minister focused his counsel on the importance of safeguarding and preserving traditional art and knowledge in the framework of globalization and on the leading role Tunisia is playing in this field.

Fact-Finding Mission 8

South America
Peru (May 10 to 13, 1999)
Bolivia (November 17 to 19, 1999)

The mission to Peru was conducted by Richard Owens, Director of the Division of Global Intellectual Property Issues, and Octavio Espinosa, Director-Advisor, Cooperation for Development (Law and Industrial Property Information) Department of WIPO. The mission to Bolivia was conducted by Mr. Nuno Pires de Cravalho, Senior Legal Officer, Division of Global Intellectual Property Issues, WIPO.

Peru (May 10 to 13, 1999)

Lima

The meetings and activities of WIPO in Lima were coordinated by the Ministry of Foreign Relations of Peru through its Permanent Mission in Geneva and the Chancellery in Lima, which drew up the program of activities and arranged most of the meetings. The mission was facilitated by the National Institute for the Defense of Competition and Intellectual Property (INDECOPI), which made a room permanently available to the WIPO delegation for receiving and attending to interviewees.

On **Monday May 10,** the Ministry of Foreign Relations convened a meeting with various national authorities associated with matters of intellectual property, industry and trade, indigenous affairs, culture and the environment, which took place at the headquarters of the Chancellery in the Palacio de Torre Tagle. The following persons were present:

Julio Muñoz, Director, Economic Entities; Rosalina Gallardo, Division for the Environment, Ministry of Foreign Relations; Huber Wieland; Elizabeth Castro Benavides, all of the Ministry of Foreign Relations; Jorge Vega Matallana and Elena Conterno Martinelli, both Technical Secretary for Indigenous Affairs, PROMUDEH; Victoria Elmore, Consultant, Ministry of Industry, Tourism, International Business Negotiations and Integration (MITINCI); Sara Rosadio, MITINCI; Victor Revilla, National Institute for the Defense of Competition and Intellectual Property (INDECOPI); Alberto Butler, National Institute of Traditional Medicine, Ministry of Health; Joaquina Albán Castillo, Museum of Natural History, Higher National University of San Marcos (UNMSM); Betty Millán Salazar, Museum of Natural History, Gymnospermae and Monocotyledons, Faculty of Biological Science, UNMSM;Antonietta Gutiérrez-Rosati, Institute of Research of the Peruvian Amazon (IIAP) Department of Biology, National Agrarian University of La Molina; María Luisa del Río, National Council for the Environment (CONAM); Erick Pajares, Consultant, National Commission on Biological Diversity; and Miguel Holle, International Potato Center, (CIP).

At that meeting the representatives of WIPO explained the background to the mission and its aims, and also the activities planned under the WIPO Program on Global Intellectual Property Issues, in particular the subprogram on Intellectual Property Rights for New Beneficiaries.

For their part the various authorities present spoke on specific aspects and activities that had a bearing on the theme of the mission. The authorities highlighted as the matter of current concern the introduction of a legal regime for the recognition and protection of the traditional knowledge held by native communities (from forest regions) and rural communities (from mountain regions). In connection with this subject there was also a mention of the matter of access to natural resources, to which much of that traditional knowledge applied, and on which there was already a common regime in existence which had been adopted in the framework of the Andean community. It was pointed out that cultural and linguistic diversity was very great in Peru, encompassing some 72 ethnic groups and 14 families of languages.

Thereafter the representatives of WIPO met at INDECOPI with Miguel Holle of the International Potato Center (CIP), located at the National Agrarian University (in La Molina). Mr. Holle said that country-dwellers were maintaining traditional varieties and preserving biodiversity *in situ*. They knew the varieties of every plant and the uses that could be made of them, and applied different growing techniques which allowed production to take place in the altiplano, where otherwise nothing would be produced at all. He pointed out that traditional knowledge of the properties and characteristics of plant varieties was being lost more than the varieties themselves. He also pointed to the activities carried on at municipal and provincial level in the mountainous regions, including seed and farm product fairs; consideration could be given to the organization of municipal registers of varieties of traditional and local cultivars.

On **Tuesday May 11,** the delegation met César Sarasara, President of the Confederation of Amazonian Nationalities of Peru (CONAP), Samuel Cauper, Secretary of Economy of CONAP, and Mrs. Mercedes Manriquez, Legal Advisor to CONAP. It was explained that CONAP had devoted itself to both lobbying and technical work, with a view to achieving a defense of culture such as would not isolate the indigenous peoples of the Amazon region but rather serve the community by opening up a space within which the cultural values of those indigenous peoples might be respected. Intellectual property was treated collectively in indigenous communities; the Amazonian peoples considered that the intellectual property rights in their knowledge should be collective, as the indigenous people were a single unit, espousing a single culture. Among those peoples knowledge was handed down from generation to generation as part of a sacrosanct but unwritten "book." It was necessary to reassess collective creativity hand in hand with individual creativity. Collective creativity emanated from a culture different from that recognized by individual property, in such a way that collective property should also be acknowledged as an expression of that culture.

Indigenous peoples neither could nor wished to live in isolation from Western society, as they wished to take advantage of the benefits of the modern age in order to improve their standard of living. It was necessary to exchange knowledge between the two cultures. In that context two Aguaruna Huambisa organizations affiliated to CONAP had entered into an agreement on the collection of biological material with Washington University (St. Louis, Missouri, United States of America), the Natural History Museum of the Higher National University of San Marcos and the Cayetano Heredia Peruvian University, and also a know-how licensing agreement with the US firm G.D. Searle and Co. The purpose of those agreements was to develop pharmaceutical products on the basis of the biological material collected and on traditional knowledge of its medicinal applications. The agreement was concluded in 1996 and has the approval of Peru's National Institute of Natural Resources (INRENA).

It was mentioned that it was not desirable to have regulation of access to traditional knowledge that would unduly limit the freedom of action of indigenous peoples, it being preferable to have regulations that would make it easier for the indigenous peoples to negotiate their own resources and knowledge, bearing in mind that they now had sufficient bargaining power. Any regulation should have the effect of protecting the holders of the traditional knowledge but also leave them sufficient freedom of action for the negotiation of contracts. It was important to apply the principle of prior informed consent, which required the presence of the foreign contracting parties on the national territories in which the genetic resources were located, and also respect for the traditional decision-making methods of the participating communities. It was also necessary to give preference to direct negotiation between representatives of the parties rather than to negotiate by correspondence.

Concern was expressed regarding the possibility of securing protection against the appropriation or pirating of traditional knowledge, especially in cases where the knowledge was acquired and then reserved by virtue of patents or other intellectual property titles without sufficient involvement or control on the part of the peoples who originally held the knowledge. There was interest among indigenous communities in knowing more about intellectual property, so that their action for the defense and negotiation of their knowledge could be better organized.

The delegation then had a meeting with Jorge Noriega of the Center for the Study and Promotion of Development (DESCO). Mr. Noriega explained that, in the course of the writing of national legislation on the protection of the traditional knowledge of indigenous peoples, a discussion had arisen on the differences between the treatment of individual knowledge and that of collective knowledge. It had been noticed that the Quechua and Aymara communities (of the mountain region) had attained a greater degree of assimilation to the national community, with the result that their demands were focused more on the problems of poverty and access to economic resources. The native communities of the forest regions identified more with their culture, and claimed special treatment in matters of education and health. The forest-dwelling communities maintained their ownership of the land, knowledge and natural and cultural resources in a collective community form, whereas the country-dwelling communities of the mountain region had begun to lose those characteristics, to such an extent indeed that they were allowing land that was traditionally communal to be divided up.

On **Wednesday May 12,** the delegation had a meeting with Jorge Caillaux, President of the Peruvian Society for Environmental Law (SPDA), Manuel Ruiz Müller, International Affairs Program, Biological Diversity, SPDA, and Alejandro Argumedo of the Association for Nature and Sustainable Development (ANDES) and coordinator of the Indigenous Peoples' Biodiversity Network (IPBN).

Mr. Argumedo explained the details of a project that is taking place with eight communities of the department of Cuzco, with the participation of the University of Cuzco and the Center for Genetic Resources of Tubers and Andean Root Plants (CERGETIR), which involves work on an inventory of agricultural genetic resources, in particular the various varieties of potato. The inventory includes information on biological resources, for instance potato seed, and attempts are being made to establish a protocol for access to those agricultural genetic resources on the basis of provisions and rules of access deriving from custom. This project will make it possible to identify and describe biological resources and also the knowledge associated with them, and the corresponding traditional applications. For instance, there are varieties of potatoes that are used only for ceremonial acts (such as weddings) and which are maintained for those purposes alone. It has been noted that there are specific rules of access, exchange and transfer of those natural resources.

Another matter for concern was that of the rights that may stem from traditional musical expressions and from the industrial designs of craft products. It has been detected that Internet sites were selling traditional Peruvian music, and that Cuzco textile designs were being copied, with traditional rug patterns being reproduced on clothing, purses and other industrially produced articles. In some cases the designs of original rugs produced in indigenous communities were being photocopied by industrial firms which thereafter reproduced the design on industrially manufactured garments.

Mr. Argumedo considered that contracts affording access to traditional knowledge and to genetic resources should take due account of the rural development of the communities that provided the knowledge or resources. It was essential to set up a trust fund into which the monetary profits derived from exploitation of knowledge and biological resources could be deposited, and that principle should apply regardless of whether or not a product actually resulted from the biological resources communicated.

On **Thursday May 13,** the delegation met with Mario Álvarez of the Association for the Defense and Development of the Andean Communities of Peru (ADECAP). Mr. Álvarez explained that ADECAP was conducting its activities with communities in the Department of Huancavelica, who lived between 2,800 m and 4,500 m above sea level in an attempt to develop that area in terms of education, health and production. The development projects were being carried out by members of the communities themselves, with the support of the directors and professional staff of ADECAP.

There was concern over the lack of control of the appropriation, use and exploitation by persons from outside the region of expressions of traditional culture, and also of traditional knowledge and natural resources. For instance, the dances typical to the region of Huancavelica were being studied by outsiders, who would sometimes adopt them and copy them without seeking authorization or offering any compensation. Rural communities had knowledge of varieties of medicine or plants and of their therapeutic applications, but that information was also being abstracted without due respect for the knowledge, and sometimes without any mention of the original source of the material or knowledge. Moreover, there was usually no distribution of profits when such resources were commercially exploited. Traditional communities still possessed valuable knowledge on such things as irrigation, stoneworking, cosmic vision and exploitation of the planet. That knowledge had never been written down, and was handed down from generation to generation within the communities concerned. Rural communities still had a great deal of knowledge that they kept secret. That knowledge could be given a more technical slant and be developed further and combined with modern technology, provided that it was done on the basis of the sharing of the knowledge and recognition of and respect for the input provided by the communities.

Mr. Argumedo considered that the protection of the intellectual property rights in such manifestations of traditional knowledge should be introduced not only as a means of achieving a distribution of monetary profits but also so that the knowledge might be shared with the rest of the world, in such a way that both parties could make use of, and reap the benefits, of the knowledge. The customs and the traditional and technological knowledge that had evolved in the country over the previous 3,000 years had to be protected. Traditional knowledge derived from contact with the soil, and it had been observed that many traditional techniques had advantages over modern technology, inasmuch as the latter used synthetic or chemical products that had adverse effects on consumers. Rural communities aspired to participate more in an expanded market, which included export markets, and to that end it was necessary to lower tax obstacles and provide the means of promoting the commercialization of products of the mountains. There was a desire for representatives of the communities concerned to be given specialized training in intellectual property matters, so that the intellectual property machinery could be used better for the protection of the traditional expressions of culture and marketable traditional knowledge.

Later the delegation had a meeting with Guillermo Arévalo, President of the Institute of Marketing and Research on Amazonian Medicine (IDIMA). Mr. Arévalo explained that traditional medicine was the crux of the entire traditional culture of all Amazonian peoples. The medicine men or shamans were the spokesmen through whom the essential knowledge of medicine, agriculture, fishing, hunting and social harmony that was essential to the survival of the community was communicated to the people. The environment was essential to the maintenance of the balance of those communities. They were very rich in traditional knowledge and cultural manifestations, but they were vulnerable to outside influences. The case was mentioned of foreign missionaries who had learned the inherent technique and art of certain native designs which were then taken abroad, copied and marketed with no concern for the way in which that might affect the original communities.

Medicinal plants of the Amazon region were falling victim to piracy. Plants were being taken to developed countries by a variety of people, including traders and representatives of religious sects, who harvested and depleted woodland areas without any concern for reforestation, and also without sharing the resulting benefits with the communities in which the biological material originated. It was necessary for the communities to be able to negotiate access to their knowledge and resources, to which end it would always be necessary for full information to be provided on the use or purpose for which the plant resources collected were destined.

Thereafter the delegation met with Wrays Pérez, Secretary of the Interethnic Association for the Development of the Peruvian forest (AIDESEP). It was mentioned that AIDESEP had a program whose purpose was to promote the grant of entitlement to the lands of affiliated communities, and also programs of bilingual education and indigenous health through the use of medicinal plants, and agro-ecological market gardens.

The traditional knowledge held by the communities included secrets concerning the management and preservation of woodland, secrets of hunting and fishing, clothing, textiles and hut-building materials and secrets concerning the working of the land, the raising of children, women, traditional medicine and dance, to mention only those. Some of the techniques of the woodland communities were being appropriated by foreigners without either authorization or compensation. For instance, the fabric of houses and huts (which used palm fibers) was being copied abroad by companies providing tourist facilities. In other cases traditional cultural manifestations were being copied and distorted, for instance in the case of the traditional dances which, having been copied, were taught by persons with no connection with the communities, so that original steps and patterns were altered without any reference to the original communities. Mr. Pérez reiterated that the indigenous communities wished to share their knowledge, but only in so far as they were assured of recognition and respect for their rights in the knowledge and in the biological resources to which it related. The prime concern of the communities was not an economic concern, it was concern for the preservation of their traditional knowledge and culture, which had to be protected against indiscriminate commercialization.

Afterwards the delegation spoke to Mrs. Tarcila Rivera Zea, President of the Center of Chirapaq Indian Cultures. Mrs. Rivera explained that the Center included among its aims efforts to recover and reaffirm indigenous identity in the youth of the country's indigenous communities, exploiting and developing craft practices and traditional expressions of culture. She considered that the music, artistic expressions and iconography of the communities should be recognized as being the property of the peoples in which they originated, and respected accordingly. Questions were being asked on how to set about securing recognition and protection for those manifestations and avoiding unauthorized copying. The role of the State in the defense of indigenous knowledge inside and outside the country had to be made clear in order to prevent the abstraction and copying of traditional creations which were subsequently registered on behalf of third parties without any acknowledgment. Another thing that had to be avoided was indiscriminate copying on the part of the actual communities or artisans of one and the same region, who could be induced to engage in such activity by local entrepreneurs. Practices had been observed whereby an entrepreneur would contract one or more local craftsmen to copy textile designs from photographs taken of designs embodied in the creations or products of other local craftsmen, who could not then prevent those textiles from being indiscriminately reproduced.

Finally the delegation met with Lelis Rivera, the executive Director of the Center for the Development of Indigenous Amazonia (CEDIA), and Erick Pajares, Advisor to CEDIA. Messrs. Rivera and Pajares explained that CEDIA endeavored to secure respect for the ownership of indigenous knowledge and to prevent that knowledge from being misappropriated by persons from outside the communities concerned. Cases had been noted in which investigators would visit native communities for years without the product of their investigations ever being seen, giving the impression that they were rather serving as a screen behind which business enterprises were seeking to gain access to the traditional knowledge of the indigenous communities. The communities were therefore being advised to exercise caution in the negotiation and handing over of their knowledge of biological resources, and it was being recommended that they should demand some kind of compensation when the transfer of their knowledge took place. CEDIA had worked out some standard clauses that could serve the purposes of contracts for the transfer of traditional knowledge, which specified that, whenever any commercial result was achieved, the community in which the knowledge originated would be entitled to a share in the profit. In some cases those profits would have to be distributed according to the ethno-linguistic group rather than according to any specific community. It should also be borne in mind that one and the same biological resource could be known to two or more native or indigenous communities which might use it differently. The beneficiaries of the profits would have to encompass the entire ethnic group, not only the person or group that provided the knowledge. It was possible to set up internal bodies to settle the question of the sharing of profits.

Concern has also been expressed over the need to control certain practices regarding the collection of human genetic or biological material, for instance the collection of samples of the blood, cells, tissues, bone or skin of members of native communities. The collection of such material should not be generally accepted in the course of research focused on traditional knowledge, as it is important to demand more clarity and information before treaties or agreements are signed that afford access to knowledge or biological resources.

La Paz, Bolivia, November 17 to 19, 1999

The meetings and activities of WIPO in La Paz were coordinated by the Ministry of Foreign Affairs and Religious Affairs of Bolivia, acting through its Permanent Mission in Geneva and the Directorate General of International Economic Organizations of the Vice-Ministry of International Economic Relations and Integration, which developed the program of interviews and arranged the meetings. Ms. Erika Dueñas, Intellectual Property Director of the Vice-Ministry of International Economic Relations and Integration (Ministry of Foreign Affairs and Religious Affairs) coordinated all the activities of the mission.

On **Wednesday November 17**, the Ministry of Foreign Affairs and Religious Affairs convened meetings and arranged interviews with three original indigenous organizations; the meetings were held in the Olañeta Lounge, on the premises of the Chancellery, with representatives of the following organizations:

- Central Union Confederation of Rural Workers of Bolivia (CSUTCB) and Bartolina Cisa Organization;
- Keep on Sowing Keep on Dreaming (para Seguir Sembrando para Seguir Soñando) Cultural Movement, and the
- Confederation of United and Organized Indigenous Peoples of Bolivia.

All meetings began with a brief introduction by Ms. Erika Dueñas on the objectives that the Government of Bolivia had set itself at the time of inviting the WIPO fact-finding mission. Ms. Dueñas mentioned the particular importance that Bolivia attached to the protection of the traditional knowledge of its peoples, most of them indigenous, within the framework of biodiversity and Andean integration. For his part the representative of WIPO gave an account of the background to the mission and its objectives, and also of the activities planned under WIPO's Global Intellectual Property Issues program, especially the sub-program on the intellectual property rights for new beneficiaries.

The representatives of the various indigenous peoples spoke of their original culture, customs and identity and of the effects that colonization had had on them. They referred to the various fields of traditional creativity which included music, fabrics, ceramics and medicine, and explained how the absence of protection machinery made it easy for the knowledge accumulated by indigenous peoples to be appropriated by foreigners. There was likewise no protection for the plants grown by indigenous countrydwellers, which had given rise to varieties that were currently used throughout the world, including potatoes, maize and rubber. Emphasis was also placed on the importance of traditional medicine to countrydwellers, as modern medicine did not reach the remotest areas of the *altiplano*. A request was pending for the creation of a traditional medicine course at a medical faculty as a means of integrating the two types of medicine. A mention was also made of the need to engage in extensive consultations with indigenous communities and their representatives, both in the lowlands and in the high tableland, on the subject of the adoption of laws and regulations for the protection of traditional knowledge in such areas as biodiversity, tourism, health and intellectual property. One concern frequently shown had to do with the eventual adoption of intellectual property laws that took account of the TRIPS Agreement and amended the legislation of the Andean Community. The need to consult the custodians of traditional knowledge before the enactment of such legislation was reiterated.

On **Thursday November 18** the formal ceremony for the inauguration of the fact-finding mission took place in the Red Lounge of the Chancellery. Mr. Guillermo Loría, Director General of International Economic Organizations of the Ministry of Foreign Affairs and Religious Affairs, welcomed the WIPO representative, saying that the importance attached by Bolivia to the subject of traditional knowledge was due to the knowledge in question being part of a living culture, and that it was imperative to make the rest of the world aware of the creative contributions made by that culture, so they had to be preserved and protected. Speaking in the name of the original indigenous peoples of Bolivia, Dr. Walter Alvarez Quispe, a traditional doctor and President of SOBOMETRA (Bolivian Society for Traditional Medicine), said that the day was a very important one for the indigenous communities of Bolivia, as various ministries of the Government of Bolivia and also WIPO were present for a debate on the problems of traditional knowledge. He added that not just one but several cultures were represented in Bolivia, extending beyond the country's man-made borders and merging with a wider Andean culture. That said, he introduced the members of the Supreme Council of the Kallawayas, natives of the Bautista Saavedra Province of the Department of La Paz, who presented a ritual in honor of *pachamama*, or mother earth, as a means of starting a successful fact-finding mission.

Thereafter there was a general meeting with all the institutions invited to take part in the mission. This was attended by representatives of the Directorate General of International Economic Organizations, the National Intellectual Property Service (SENAPI), the Vice-Minister of Indigenous Affairs and Aboriginal Peoples, the Directorate General of Biodiversity (Ministry of Sustainable Development and Planning), the Bolivian Society for Traditional Medicine (SOBOMETRA) and the Council of Ayllus and Markas of Qoullasuyu (CONAMAQ).

Dr. Javier Ernesto Muñoz, representing the Vice-Minister of Indigenous Affairs, spoke of the legal aspects arising from the preliminary draft industrial property law, which contained a chapter on community intellectual property and various items concerning the legal capacity of indigenous peoples. He also mentioned the Vice-Ministry's work on the protection of the cultural heritage, which had involved the organization of five workshops for the drafting of the new legislation. The representative of SOBOMETRA spoke on the importance of traditional medicine and the need to protect it against the dangers that indigenous culture and religion were also facing.

Dr. Pablo J. Aramayo Avila, Director of the Copyright Department of SENAPI (the recently created National Intellectual Property Sevice), described the Copyright Law, which featured a chapter on folklore and handicraft. He announced that the future intellectual property law currently in preparation would broaden the concept of folklore to accommodate traditional knowledge. The main concern was to promote the production of traditional community culture as a means of support whereby the communities themselves might raise themselves up out of poverty. Copyright machinery was not sufficient for that; the actual concept of folklore had to be broadened.

Mr. Samuel Blanco Villarte, representative of CONAMAQ, asked whether WIPO was considering the possibility of introducing legal machinery that would recognize past situations. He was pleased to see an international organization showing interest in the protection of the cultural heritage of the indigenous peoples of Bolivia. It was however essential that those indigenous peoples should be involved in the adoption of the WIPO conclusions.

Mr. Alberto Rodrlguez Zeballos, representing CIDOB, emphasized how necessary it was for indigenous peoples to take part in the drafting of laws on their cultural heritage. He described the work of CIDOB, which consisted in the arrangement of workshops for the gathering of information on indigenous communities. In the lowlands the work had been completed and a report had been drawn up. Now that Convention 169 of the International Labour Office had become law in Bolivia, the participation of indigenous peoples was a legal obligation.

The representative of CONAMAQ mentioned an example of the loss of the original characteristics of indigenous culture. Before colonization the indigenous people had only three feast days a year, which coincided with periods in traditional agriculture. At each celebration a particular kind of music was played; now, however, the same music was heard throughout the year, and such celebrations were held every day.

Ms. Beatriz Zapata Ferrufino, head of the Genetic Resources Unit of the Directorate General of Biodiversity, presented a diagnosis of the situation in terms of Andean Decision 391. She referred to the experience of

294

CIDOB, and announced that the work would continue in the highlands. Bolivia's intention was to present a common proposal for a traditional knowledge protection regime for the Andean Community. The adoption of the future intellectual property law was bound to raise concerns, and it was necessary to consider how the protection of traditional knowledge could be reconciled with other aspects of intellectual property.

Mr. Gonzalo Vies Beltrán, Acting National President of SOBOMETRA, said that a national system had to be introduced for the intellectual property protection of the knowledge of indigenous peoples, and that it was necessary to create support machinery for indigenous creators so as to give them access to the national office at no cost. On the other hand, it was of fundamental importance to the indigenous people that they should share in whatever benefits the pharmaceutical industry derived from their knowledge.

Mr. Edwin Urquidi, representative of the Industrial Property Department of SENAPI, said that priority was being given at the present time to the application of the TRIPS Agreement. At the same time it was necessary to consider the possibility of applying intellectual property machinery to the protection of traditional knowledge (in the form of patents, geographical indications and designs).

The representative of the Chancellery announced that the aim of the Government of Bolivia was to pass a law that would make intellectual property protection compatible with respect for and the protection of traditional cultures. In response to observations by a number of participants who showed concern regarding the coordination and information work that might be done by the Government, she said that the Chancellery would set up an evaluation group to achieve better coordination and participation of indigenous communities, given the complexity of the subject matter and its relation with a number of ministries. In that way the intellectual property provisions connected with the protection of traditional knowledge would be developed jointly, the aim being to include that subject in the draft intellectual property code of the country, which was being coordinated by the Ministry of Justice and Human Rights.

The representative of WIPO was then received by Mr. Edwin Ortíz Gandarillas, formerly Director General of International Economic Organizations at the Ministry of Foreign Affairs and Religious Affairs, who expressed concern regarding the relative positions of Bolivia and the Andean Community in the discussions on TRIPS and also regarding the free access to markets afforded by the WTO. At the same time he highlighted the question of biodiversity and traditional knowledge as being a very important subject.

Thereafter the representative of WIPO met with representatives of CONAMAQ, who described the main features of their culture, their plant varieties, the importance of potatoes, quinoa and oca and their music and textiles. One point repeatedly brought up was the lack of consultation with those who were the real indigenous leaders when national and international provisions were drafted on the preservation of biodiversity and access to it. Another was the possibility of retrieving the textiles and designs made by (indigenous) Aymaran mamas that were being exploited in foreign countries. The protection of the knowledge and culture of the Aymara was above all a matter of respect for their dignity. The Aymara had not always been poor, but rather had been dispossessed of their wealth. The representatives of CONAMAQ handed the representative of WIPO a document entitled "From the National Council of Ayllus and Markas of the Qoullasuyu to the Fact-Finding Mission of the World Intellectual Property Organization on the Industrial Property Rights of the Indigenous People of the Andes." It described certain documented cases of appropriation of traditional medicinal knowledge by unauthorized third parties. A representative of CONAMAQ from the Council of Aymaran and Quechuan Mallkus and of CMTA-PPA, the Council of Mallkus-Thallas-Amaoutas of the Parliament of the Aymaran People, (both members of CONAMAQ), delivered another document entitled "Intellectual Property Rights in Genetic Resources," and also a copy of Supreme Decree No. 22546. This decree approved and supported all action undertaken to bring about the full recovery of the ceremonial textiles of the ayllus of Coroma, and consequently enabled the cantonal authorities to resume and pursue the action, both for themselves and in the name and on behalf of the Bolivian State if necessary.

Subsequently the WIPO representative met with members of the Interdisciplinary Group on Intellectual Property in the Red Lounge of the Chancellery. The Group was introduced by the Director General of International Economic Organizations of the Vice-Ministry of International Economic Relations and Integration, who drew attention to WIPO's support for the Group's preparatory work, and also mentioned Bolivia's interest in the negotiations going on within the WTO.

A number of members of the Group gave presentations on the position regarding the intellectual property legislation being drafted as a means of promoting the implementation of the TRIPS Agreement. On the subject of copyright for instance, a mention was made of the need to do parallel work to provide for the special nature of traditional knowledge; at the same time it was important for the work in that area not to be regarded as the introduction of domestic provisions only, but of international provisions as well. In the field of industrial property, the need for special protection for traditional knowledge was already recognized. Another matter of concern was the lack of training at the national level to deal with such subjects. Also, while there had been international contacts with a view to the work of protecting traditional knowledge, there were not enough bilateral agreements to afford the necessary volume of information and laws, apart from which the culture budget was inadequate; and yet the compilation of inventories and catalogues of traditional knowledge was an essential assignment. There was some discussion of the interest, for Bolivia, of conducting an international seminar in which countries that had already adopted legislation on the protection of traditional knowledge would participate, the aim being to promote the exchange of experience and achieve an international consensus. It was likewise proposed that Bolivia should be considered in the selection of countries in which WIPO would study the practical possibility of using existing intellectual property machinery to protect traditional knowledge (pilot projects). One participant gave information on the amendment of Decision 344 to bring it in line with the TRIPS Agreement. The inclusion of a provision obliging patent applicants to give information on the origin of genetic resources used in biotechnological inventions was examined with the participants. The representative of WIPO reported on the Working Group on Biotechnology organized by WIPO, and its importance in relation to biodiversity.

The WIPO representative subsequently had a meeting with members of the workshop on Andean Oral History (THOA). THOA is an indigenous organization of professionals from various fields who have set up a technical team responsible for disclosing indigenous culture; its work is best known through the radio plays that are broadcast throughout the country and also in Ecuador and Peru. Each of the members of THOA described the subject in which he is specialized: oral history and literature, textiles, music, genetic resources and cultural symbols and values. The concerns arising in each area were discussed at length.

On **Friday November 19** the members of the mission were received by a delegation from the Mallcus at the headquarters of the Tiahuanaco Rural Association. The representative of the Chancellery described the objective pursued by the Government of Bolivia in inviting WIPO to conduct the fact-finding mission. The representative of WIPO provided information on the Organization's program of activities in the field of protection of traditional knowledge, and explained what the work prospects were, depending as they necessarily did on active interest on the part of WIPO Member States, of which Bolivia was one. A number of participants expressed their concern in the face of the economic exploitation of the town of Tiahuanaco, which should not be considered a collection of ruins but rather the expression of a culture, manifested in the buildings of Tiahuanaco and alive in the hearts and minds of the indigenous community. In addition the exploitation should take place first and foremost for the benefit of the local communities. A subject of major concern was the declaration by UNESCO declaring Tiahuanaco part of the world heritage of mankind. The Council of Ayllus and Communities of Tiahuanaco had ratified its right of ownership of the site as the cultural heritage of the Aymara nation. The document entitled "ILO and UNESCO," which contained the "Tiahuanaco Declaration," was presented to the representative of WIPO for inclusion in his mission report.

On his return to La Paz, the representative of WIPO had a meeting with a representative of the National Herbarium of Bolivia, who described her ethnobotanical research work. The talks concentrated on professional ethics and the protection of the intellectual property aspects of the gathering of information from indigenous peoples. The ethnobotanical works published by the Herbarium categorized indigenous peoples as co-authors, in spite of their having been recently recognized as authors of traditional knowledge.

The fact-finding mission culminated in a general meeting with all the participants for the drawing of conclusions. The representatives of various sectors of the Government, SOBOMETRA, CONAMAQ, THOA and the National Herbarium of Bolivia were present at the meeting, the purpose of which was to consolidate the various subjects discussed in the course of the mission, and at the same time to devise a program of future work. While it is true that Bolivia has to carry on its efforts towards full implementation of the TRIPS Agreement, it is no less certain that the country is looking for machinery of both international and national character with which to protect traditional knowledge. The work will have to be done in conjunction with the representatives of traditional communities. The interrelatedness of various problems (political, economic and social) is also a reality and it is therefore crucial for WIPO to take part in the training and negotiating process. The National President of SOBOMETRA handed the representative of WIPO a document containing the statutes of the society, and also documents on the practice of traditional natural medicine in Bolivia, on technical-scientific cooperation between foreign agencies and the Ministry of Planning and Coordination of the Government of Bolivia, acting through the Department of Science and Technology, and on other arrangements. The representative of WIPO thanked all the participants for their presence and involvement in the debates, from which WIPO would certainly extract invaluable material for its future work. The importance of indigenous communities in the training of the people of Bolivia was a telling argument in favor of WIPO considering another mission to the country, especially in connection with the next stage of the program on traditional knowledge. In addition the representative of WIPO paid a special tribute to the culture and the human warmth of the indigenous peoples of Bolivia. Words alone were not sufficient to thank the Government of Bolivia for the concern shown, the care taken and the general kindness of the welcome extended. The representative of the Chancellery thanked WIPO for its availability and its interest in working with the Government of Bolivia on this subject of fundamental importance; for the Government of Bolivia, it was one that had to be dealt with as a matter of urgency, and it was not a question of marking time in the study and research stage but rather of moving on to the negotiation and adoption of specific provisions, without overlooking the need to document and protect traditional knowledge.

Fact-Finding Mission 9

The Caribbean
May 30 to June 9, 1999

The mission was conducted by Miss Faith Odibo, Senior Program Officer and Mr. Wend Wendland, Senior Legal Officer, of the Global Intellectual Property Issues Division of WIPO.

Trinidad and Tobago (May 30 to June 2, 1999)

WIPO's meetings and activities in Trinidad and Tobago were facilitated and coordinated by the Intellectual Property Office, Ministry of Legal Affairs, principally by Ms. Mazina Kadir, Controller. WIPO also identified traditional knowledge holders and their representatives, and other resource persons, with whom meetings were arranged. The WIPO delegation was assisted and accompanied to most of the meetings by representatives of the Intellectual Property Office, particularly Ms. Anne Marie Omed Joseph, Deputy Controller (Ag.), and Mr. Malcolm Spence, Chief Technical Examiner.

Port of Spain

The WIPO representatives arrived in Port of Spain on Saturday, May 29, 1999, where they were met by Ms. Kadir. On **Sunday, May 30,** the delegation participated in activities organized by the Indian community in celebration of "Indian Arrival Day", which commemorates the arrival in Trinidad and Tobago in 1845 of indentured laborers from India. The delegation witnessed a colorful parade, with rich depictions of traditional Indian clothing, performance, dance and music. On this occasion, the delegation met the Honorable Minister of Legal Affairs, Ms. Kamla Persad-Bissessar.

Moruga and Siparia

On **Monday, May 31,** which was a public holiday to commemorate "Indian Arrival Day", the WIPO representatives visited the Moruga community in the southern part of the island of Trinidad. The delegation participated in a meeting with members of the community, under the chairmanship of Local Government Representative for the electoral district of Moruga, Mr. Godfrey Lee-Sing. Moruga community members, comprising persons of mainly African, Indian, Chinese, and Latin American descent, spoke of their wish to preserve the "Patois" language and traditional medicinal remedies, still relied upon particularly by the older generation. The need for the documentation of traditional knowledge was articulated, as was a need for a community such as this to receive information and basic education on the intellectual property system.

From Moruga, the delegation traveled to Siparia, north east of Moruga, where the delegation visited the La Divina Pastora parish. A discussion was held with Sister Colomba Byrne, Father Stephen Doyle and Ms. Theresa Noel on intellectual property in relation to religious and spiritual beliefs, symbols and icons. It was generally agreed that, while religious beliefs are not susceptible to intellectual property protection, religion and spirituality play a prominent role in traditional healing methods and practices in Trinidad and Tobago.

Throughout this day, apart from the Government officials referred to above, the WIPO representatives were accompanied by Ms. Valerie Stephenson Lee Chee, a descendant of Africans brought as slaves to Trinidad and Tobago and a representative of the Orisha (Yoruba) community in Trinidad and Tobago, and Mr. John Cupid of the National Carnival Commission.

Port of Spain

On the following two days, **Tuesday, June 1,** and **Wednesday, June 2,** the WIPO officials participated in a series of seminar-style meetings organized by the Intellectual Property Office. At each of these meetings, the WIPO delegation made a presentation on WIPO and its activities relating to traditional knowledge and thereafter answered questions and participated in discussions.

The first of these meetings, on the morning of **Tuesday, June 1,** was opened by the Acting Permanent Secretary of the Ministry of Legal Affairs, Mr. Roopdial Ramnarine. Present at this meeting were: Mr. Everard Byer, Member, World Board of Directors, International Federation of Organic Agricultural Movements (IFOAM); Ms. Olive Ramchand, of Fitzwilliam, Stone, Furness-Smith and Morgan, Attorneys; Ms. Debra D'Ade, J.D. Sellier and Co., Attorneys; Ms. Irani Ramoutar, Attorney; Mr. Chaitram Bhola, Customs and Excise Division; Ms. Rayan Ramsundar, National Institute of Higher Education, Research, Science and Technology (NIHERST); Mr. Anthony Vieira, of Mair and Co. Attorneys; Ms. Alison Demas, Attorney, Trinity Chambers; Ms. Sharon Le Gall, Attorney; Mr. Vasneist Kokaram, M.G. Daly and Partners, Attorneys; Mr. John Cupid, National Carnival Commission; Ms. Patricia Simon, of Alexander, Jeremie and Co., Attorneys; Mr. Inshan Hosein, Legal Officer, Ministry of Legal Affairs; Ms. Lorraine John, Legal Officer, Ministry of Legal Affairs; Ms. Kimberley Erriah, Ashmead Ali and Co., Attorneys; and, Ms. Pearl Springer, Director, National Heritage Library.

Topics covered during this meeting included the relationship between the protection of intellectual property and the preservation of heritage and culture; the need for an "audit" of indigenous technology for its appropriate validation and valuation; examples in Trinidad and Tobago of the commercial exploitation of locally-found resources; the so-called terminator gene technology; the potential use of geographical indications; the prominent role of religion and spirituality in traditional healing in Trinidad and Tobago; the role of intellectual property in economic development; and, the important role of national governments in promoting and implementing intellectual property protection.

The second meeting on that day concerned more specifically biodiversity-related issues. Present at this meeting were: Dr. Antonio Pinchinat, Regional Specialist, Inter-American Institute for Cooperation on Agriculture (IICA); Dr. Ralph Phelps, Plant Consultant Pathologist, Agricultural Society of Trinidad and Tobago; Dr. Musa Mohamed, Caroni Research Station; Dr. P. Umaharan, Lecturer in Life Sciences, University of the West Indies; Mr. Inshan Hosein, Legal Officer, Ministry of Legal Affairs; Ms. Lorraine John, Legal Officer, Ministry of Legal Affairs; Dr. Judith Gobin, Environmental Consultant; Ms. Robyn Cross, Team Leader, National Biodiversity Strategy and Action Plan, Environmental Management Agency; Mr. Lester Efebo Wilkinson, Substantive Permanent Secretary, Ministry of Legal Affairs, presently on sabbatical leave at the University of the West Indies; Mr. Andrew Bain, environmentalist and lignoculture technologist; Ms. Rayan Ramsundar, NIHERST; and, Ms. Yasmin Barsh-Comeau, National Herbarium, Department of Life Sciences, University of the West Indies.

Issues raised during this meeting included: plant breeders' rights; the need for the documentation of flora and fauna and knowledge associated therewith; access to and benefit-sharing in plant genetic resources; the need for increased WIPO training on the intellectual property system; the status of *ex-situ* collections of plant and other genetic resources, particularly those that pre-date the coming into force of the Convention on Biological Diversity, 1992 (the CBD).

During this meeting, the WIPO representatives were also informed of the development of a National Biodiversity Strategy and Action Plan (the NBSAP) and a Committee on Biodiversity established under the Ministry of Legal Affairs. The NBSAP was established under the auspices of the Environmental Management Authority as a response to the ratification in 1996 by Trinidad and Tobago of the CBD. Its work to date has focussed on determining the current state of plants, animals and ecosystems in the country. Country-wide meetings and a national consultation are planned for 1999.

Arima

That evening, the WIPO delegation visited members of the Carib community living in Arima situated on the outskirts of Port of Spain. This community are descendants of one of the first peoples who inhabited Trinidad and Tobago, the Caribs, at the time of the arrival of Christopher Columbus in the 15th century.

The delegation met with Mr. Ricardo Bharat, President of the Carib Community, and then with Mr. Cristo Atekosang Adonis, a Shaman within the community. Mr. Adonis explained that he acts as his peoples' spiritual and medicinal healer and counselor. He spoke about the need to safeguard the plants and other resources he views as indispensable for his work by protecting the environment. He referred also to the strong spiritual element of traditional healing in his community. He believes that any benefits accruing from the use of traditional knowledge and associated resources should be shared with all indigenous peoples in the Latin American and Caribbean region, because the peoples in the region share many healing practices and natural resources.

The next seminar-style meeting, held on **Wednesday, June 2,** concerned traditional healing. The persons present were: Pundit Surujdeo Maharaj, a Hindu healer; Mr. Cristo Adonis, referred to above; Ms. Rayan Ramsundar, NIHERST; Mr. Mervyn Williams, Creative Arts Centre, University of the West Indies; Dr. Kuma Mahabir, Ministry of Legal Affairs; Mr. Lester Chadband, a traditional healer; Mr. Mazini Salim; Mr. Razack Lhageer; Ms. Lorraine John, Legal Officer, Ministry of Legal Affairs; Mr. Inshan Hosein, Legal Officer, Ministry of Legal Affairs; Mr. Antoine Dellevi, Military Museum; Ms. Dorine St. Hill and Ms. Valerie Laurent Stephens, Diabetes Association of Trinidad and Tobago; Ms. Cheryl Lans, Centre for Gender and Development Studies, University of the West Indies; Ms. Nerle Robertson, Caribbean Network for Integrated Rural Development (CNIRD); and, Ms. Karen Mohammed, Chemistry, Food and Drugs Division, Ministry of Health.

Issues discussed during this meeting included: the role of spirituality and belief in both enabling and protecting traditional healing methods; the need to consult with women healers, often the holders of the most valuable knowledge; the relationship between modern and traditional medicine; the need to validate and protect traditional healing; the often hereditary and spiritual origins of healing powers; the close connection between natural resources and the environment in which they are found, and, therefore, the importance of the need to protect the environment; the potential use of "geographical indications" to protect natural resources and goods and services derived from them; and, the need for traditional healers to form an association or other central mechanism for exchanging information and sharing resources.

That afternoon, a seminar-style meeting was held with several other interested parties, being: Mr. George Gamerdingen, International Labor Organization (ILO); Mr. Mervin Williams and Mr. Rawle Gibbons, the Festival Centre for the Creative Arts, University of the West Indies; Ms. Rayan Ramsundar, NIHERST; Mr. Alvin Seereeram, Director of Planning, Land and Marine Resources, Ministry of Agriculture,; Ms. Cynthia Ross, President of the National Parang Association; Ms. Arlene Thomas, Adviser to the National Parang Association; Mr. Bruce Wilson, Economic/Commercial Officer, Embassy of the United States of America; Ms. Lorraine John, Legal Officer, Ministry of Legal Affairs; Mr. Inshan Hosein, Legal Officer, Ministry of Legal Affairs; Ms. Fay Durrant, Director, and Mr. Zully Ramirez-Ganbaa, Legal Advisor, Association of Caribbean States; Mr. Antoine Dellevi, Military Museum; and, Mr. Lester Efebo Wilkinson, Substantive Permanent Secretary, Ministry of Legal Affairs, presently on sabbatical leave at the University of the West Indies.

The WIPO representatives learned of the Parang culture, one of the oldest in Trinidad and Tobago. Also discussed, were the trade in genetic material and genetically modified organisms, and their effects upon agriculture in developing countries; the need for documentation, the need to balance the wish for local communities to share in benefits derived from foreign research and the desirability of encouraging such research and associated investment; the activities of the World Trade Organization (WTO) relating to agriculture; the role of the Caribbean Community Secretariat (CARICOM); and, the desire for close coordination amongst all the Government departments involved in these issues.

300

Guyana (June 3 and 4, 1999)

The WIPO delegation's visit to Guyana was organized with the valuable assistance of Mr. Keith George, Foreign Service Officer II, Economic Affairs Department, Ministry of Foreign Affairs. Mr. George accompanied the delegation to its meetings, all of which took place in the capital of Guyana, Georgetown.

On **Thursday, June 3,** the WIPO delegation met with Ms. Gail Teixeira, the Honorable Minister of Culture, Youth and Sport. A wide-ranging and very interesting discussion took place. Miss Odibo and Mr. Wendland learned *inter alia* that Guyana's population includes nine different indigenous peoples, each with its own language, and that a museum dedicated to them, the Walter Roth Museum, is under construction. The WIPO representatives learned also of a perfume that has been developed by a foreign company apparently derived from a natural resource found in Guyana.

After the meeting with Minister Teixeira, the WIPO delegation participated in a seminar-style inter-agency meeting hosted by the Ministry of Foreign Affairs. The meeting was chaired by Ambassador Donald Abraams, Ministry of Foreign Affairs. Present at this meeting were: Ms. Patricia Hopkinson-Carter, Department of Law, University of Guyana (UG); Mr. John Caesar, Dean, Faculty of Natural Sciences, UG; Ms. Juliet Sattaur, Assistant Registrar of Deeds, Law Courts; Ms. Carolyn Paul, Deputy Registrar of Deeds, Law Courts; Mr. Charles Fung-A-Fat, Deputy Chief Parliamentary Counsel, Ministry of Foreign Affairs; Mr. Neville Totaram, Coordinator, National Advisory Committee on External Negotiations, Ministry of Foreign Affairs; Mr. Randolph Williams, Technical Adviser (Projects), Ministry of Culture, Youth and Sports; Ms. Jennifer Wishart, Anthropological Officer, Walter Roth Museum of Anthropology; Ms. Janette Forte, Researcher, Amerindian Research Unit, UG; Mr. Gobind Rameshwar, Technical Adviser, Amazon Cooperation Treaty, Ministry of Foreign Affairs; Mr. Bhupal Uditram, Head of Department and Special Assistant to the Minister of Amerindian Affairs; Ms. Elizabeth Cox, Agricultural Program Officer, Ministry of Agriculture; Ms. Mildred Lowe, Cultural Officer, Ministry of Culture, Youth and Sports; Ms. Carmen Jarvis, Secretary General, National Commission for the United Nations Educational, Scientific and Cultural Organization (UNESCO); Mr. Forbes July, Foreign Services Officer, and Mr. Lloyd Searwar, Director, Foreign Service Institute, both of the Ministry of Foreign Affairs.

After introducing WIPO and the purpose and objectives of the mission, the WIPO representatives fielded questions and participated in a discussion on topics such as: the need for appropriate laws protecting traditional knowledge that may readily be implemented and enforced; ongoing projects concerning, for example, the screening of plants for medicinal and other properties; the need for local capacity building; the National Biodiversity Action Committee; the possible role of immigration laws and structures to control the movement of natural resources; the fact that the enforcement of "conventional" intellectual property rights in, for example, musical works is difficult enough in a country such as Guyana (where [at the time of writing] the intellectual property legislation is outdated, based as it is upon early and mid-19th century British legislation), let alone new rights to protect traditional knowledge; the view that increased intellectual property protection may inhibit research; the communal nature of traditional knowledge; globalization; the reality that a country such as Guyana cannot afford to close itself off or be too protectionist; the role of UNESCO; the need for WIPO to further publicize its work in this field; and, the potential role of the existing Working Group on Intellectual Property in Guyana, coordinated by Mr. George (Ambassador Abraams stated that the Working Group would soon be convened to discuss the matters raised at this meeting).

After this meeting, the WIPO representatives met with Mr. Clement Rohee, the Honorable Senior Minister of Foreign Affairs. They provided the Minister with information on the mission and exchanged views with him on the protection of intellectual property in Guyana.

After this meeting, the delegation paid a courtesy visit to Ms. Jacqulyn Joseph, Director, Human Development, and Ms. Carol Laws, Cultural Officer, of CARICOM.

On **Friday, June 4,** the WIPO representatives met with the Honorable Minister for Amerindian Affairs, Mr. Francis Vibert de Souza. Mr. Uditram of the same ministry was also present. Mr. de Souza is the country's first Minister for Amerindian Affairs. Three non-governmental organizations currently represent Amerindian interests: the Guyanese Peoples Organization, the Amerindian Peoples Association and the Amerindian Action Movement of Guyana. The Honorable Minister informed WIPO of the objectives and activities of his Ministry, including a land allocation project at St. Francis Town.

The next meeting was with Mr. David Cassells, Director General of the Iwokrama International Centre for Rain Forest Conservation and Development. The Centre began operating in January 1998, and is governed by legislation enacted by the Parliament of Guyana in 1996. Iwokrama's Mission Statement is: "*To promote the conservation and the sustainable and equitable use of tropical rain forests in a manner that will lead to lasting ecological, economic, and social benefits to the people of Guyana and to the world in general, by undertaking research, training, and the development and dissemination of technologies.*"

The major focus for implementation of Iwokrama's mission are activities centered on the conservation, management and sustainable development of the 360,000ha Iwokrama Forest in Guyana, and to develop an institutional framework that would allow Iwokrama to operate as an autonomous international research and development centre. As the Centre aims to become self-financing, it is investigating the feasibility of offering, with commercial partners, various services within a sustainable development context, such as training, eco-tourism and bioprospecting. However, Iwokrama's governing legislation makes it mandatory for the Centre to undertake its mission without compromising the traditional resource access and use rights of the Amerindian people living in or near the forest. Furthermore, the Centre is committed to protecting the intellectual property rights of local communities who have long used the resources of the forest. It is also committed to ensuring an equitable distribution of the benefits accruing from the conservation and management of the forest and its broader research and capacity-building programs to the communities.

Mr. Cassells informed WIPO that the Centre is embarking on a project to develop "best practice" protocols for intellectual property rights and benefit-sharing. The Centre will be commissioning three expert consultants to develop these protocols, based upon extensive consultation with local stakeholders and experiences from around the world. Once finalized, the protocols would be used to guide the Centre's negotiations with researchers and the private sector.

The WIPO delegation then met with Mr. Indarjit Ramdass of the Centre for the Study of Biological Diversity, a collaborative effort of the UG, the Smithsonian Institution and the World Wildlife Fund. The Centre, established in 1992, is dedicated to scientific research and documentation of Guyana's rich biological heritage. WIPO was informed that Guyana has remarkably diverse habitats and flora and fauna that remain largely unexplored, with 80% of the country covered with tropical rain forests. The Centre is the repository for the Guyana National Herbarium (holding some 25,000 plant specimens) and the UG's Zoological Museum. Mr. Ramdass indicated that while he is aware that biodiversity initiatives raise intellectual property issues, he would like to receive more information on the intellectual property system, and on the biodiversity/intellectual property nexus.

WIPO then met with Mr. Al Creighton, of the Amerindian Research Unit at the UG. The Unit insists upon agreements being signed with foreign researchers, but Mr. Creighton was not certain that the agreements addressed intellectual property concerns. He expressed the need for awareness-raising on intellectual property in general and on its relevance to traditional knowledge through, for example, women's groups, the monitoring of access to genetic resources and their future use, and the formulation of rules to govern access and benefit-sharing.

Thereafter, the delegation visited the offices of the Environmental Protection Agency (the EPA), and met with Ms. Denise Fraser, Operations Director, EPA; Mr. Macsood Hoosein, Biodiversity Planner, EPA; Ms. Vimla Roopchand, Environmental Officer (Biodiversity), EPA; Mr. Ramesh Lilwah, Weed Scientist, National Agricul-

302

ture Research Unit; Dr. Leslie Munroe, Plant Protection Specialist, National Agriculture Research Unit; and Mr. John Caesar, Dean, Faculty of Natural Sciences, UG.

The EPA was established by the Environmental Protection Act, 1996, and is Guyana's national focal point for the CBD. The EPA's main tasks include the coordination of the protection of the environment and of the conservation and sustainable use of natural resources. The EPA has also established a National Biodiversity Advisory Committee (the NBAC), which is developing a National Biodiversity Action Plan. An interesting discussion ensued, involving the ownership, access to and use of Guyana's biological resources; how best to provide compensation to local communities; and, the need for an international framework to govern research and commercial activities.

The EPA has developed draft Guidelines for Academic Research, Commercial Prospecting and Other Purposes in Guyana, and two agreements, one for academic research and the other for commercial research. WIPO was requested to provide written comments on these drafts from an intellectual property perspective.

That evening, Miss Odibo and Mr. Wendland met briefly with Ms. Desrey Fox, an Amerindian anthropologist, sociologist and linguist. She also works at the Amerindian Research Institute. Ms. Fox described her work and experiences, and stressed the need for WIPO to consult directly with local communities as far as possible.

Jamaica (June 7 to 10, 1999)

Kingston

On **Monday, June 7,** the WIPO delegation's visit to Jamaica commenced with a meeting with Mr. Philip Paulwell, Honorable Minister of Commerce and Technology, the Ministry responsible for intellectual property issues in Jamaica.

The Minister described how his Ministry, through *inter alia* a Committee on Science and Technology and the Council on Scientific Research, is encouraging innovation and the commercialization of inventions in Jamaica. The Minister sees the patent system as a firm ally in these endeavors. Both the private sector and the universities are being encouraged to patent and commercialize their innovations. The Minister expressed support for the current WIPO mission.

Thereafter, the WIPO representatives visited the offices of the Institute of Jamaica (the IOJ). The IOJ was established in 1879, and currently carries out the following main functions: (a) establishing and maintaining museums and galleries for the collection, preservation and presentation of artifacts and art treasures; (b) establishing and maintaining a National Library; (c) maintaining and displaying Jamaica's national flora and fauna collections; (d) documenting and disseminating information on the impact of the African presence in Jamaica and the wider Caribbean (through the African Caribbean Institute of Jamaica/Jamaica Memory Bank); (e) developing the craft and artistic potential of children; and, (f) compiling, publishing and distributing printed information of literary, scientific and historical interest.

First, the delegation met with Dr. Elaine Fisher, the Executive Director of the IOJ. Dr. Fisher is a marine biologist by training, and the discussion focussed on the CBD; the distinctions between WIPO, the Union for the Protection of New Varieties of Plants (UPOV) and the World Trade Organization (WTO); and, various traditional Jamaican or Caribbean songs that have been adopted and commercialized by foreign artists.

The meeting with Dr. Fisher was followed by a roundtable discussion with several officers of the IOJ, including: Mr. Michael Cooke, Director Museums Division; Mr. Bernard Jankee, Director, African Caribbean Institute of Jamaica/Jamaica Memory Bank; Dr. David Boxer, Chief Curator, National Gallery of Jamaica; Mr. John Aarons, Director, National Library; Ms. Elizabeth Morrison, Zoologist, Natural History Division; Ms. Dalrene

Richards, Supervisor, Junior Centre; Ms. Joyce Campbell and Ms. Claudette Thomas of the Jamaica Cultural Development Commission; Mr. Sydney Bartley, Director, Division of Culture; and Ms. Tracey Ann Lawrence, Executive Assistant. Dr. Fisher was also present.

An interesting discussion followed on matters such as the holistic nature of traditional knowledge and culture; where protection and preservation diverge and converge; the meaning of the concept "tradition"; the need for WIPO to assist developing countries; the distinction between WIPO and the WTO; access to genetic resources; the difference between "use" and "exploitation".

That afternoon, a meeting was held with representatives of the legal profession in Jamaica. Present were: Ms. Marcia Dunbar and Mr. Cordell Green, of the Attorney General's Department; Ms. Joanne Wood of Dunn, Cox and Orett, Attorneys; Mr. Peter Goldson of Myers, Fletcher and Gordon, Attorneys, who is also the current Chairman of the Intellectual Property Sub-Committee of the Jamaican Bar Association; Ms. Carol Bernard Madden, Attorney and representative of the Chief Parliamentary Counsel; Ms. Gladys Young, Ministry of Foreign Affairs and Foreign Trade; and, Ms. Tracey Ann Lawrence.

After presenting the mandate of WIPO and the objectives of the mission, the delegation learned of: the possible introduction of a petty patent system in Jamaica; the need for education and training on intellectual property generally and the nexus with traditional knowledge more specifically; the difficulties associated with communal ownership of rights; and, the need for the documentation of that which is sought to be protected. Some of the lawyers present also expressed a degree of skepticism regarding the possibility of providing legal protection to tradition-based innovations and creations, and suggested that this was not necessarily a priority concern in Jamaica. The participants requested further information and readings on this subject.

The next meeting was with Dr. Arnoldo Ventura. Dr. Ventura is a biotechnologist and virologist, and is Special Advisor to the Prime Minister on Science and Technology. He is of the view that the present intellectual property system is inappropriate as a tool to protect the rights and interests of indigenous and local communities. Dr. Ventura also expressed the need to study the economic effects of any measures put into place to protect knowledge and access to associated genetic resources, to ensure that the cost of their enforcement do not outweigh their benefits. Possible beneficial uses of the intellectual property system to facilitate development were discussed. Also discussed were: the role of intellectual property in development; the TRIPS Agreement of the WTO; the weak bargaining power of developing countries; the need for a new value system to underpin intellectual property and other systems; and, recent trends in the generation, sharing and commercialization of knowledge.

Accompong Town

On **Tuesday, June 8,** the WIPO delegation traveled, accompanied by Mr. Bernard Jankee, to Accompong Town, situated in the mountains approximately a 4 hour drive out of Kingston, to visit the Maroon community. The Maroons are the descendants of African slaves who escaped from the Spanish colonial rulers during the British invasion and capture of Jamaica in 1655. In 1738, the British and the Maroons, represented by a Captain Cudjoe, signed a peace treaty, under which *inter alia* the liberty of the Maroons was recognized. The Maroons still call for self-determination within Jamaica.

The WIPO representatives were invited to address the Maroon Council, presided over by Colonel Sidney Peddie. The meeting took place in the small and impressive Accompong Museum, containing several photographs, drawings, artifacts and musical instruments, including the Gumbay drum, depicting the Maroons' history and culture. Those present at the meeting expressed the desire of the community to share in any benefits derived from their knowledge. WIPO learned of a relatively recent visit to Accompong by researchers from North America who gathered information and samples regarding the Maroons' plant genetic resources, which subsequently led to the publication of a book. The Maroons have, the WIPO delegation was informed, not shared in any benefits from the sale of the book. The persons present recognized, however, that their ability to control access to their resources and knowledge may be weak.

Kingston

On **Wednesday, June 9,** the delegation met with Professor Rex Nettleford, Vice Chancellor of the University of the West Indies. Dr. Fisher of the IOJ was present at this meeting. Professor Nettleford expressed the view that folklore and traditional knowledge are by their nature in the public domain, and not suited for an exclusive rights regime which depends upon tracing the origins of protectable subject matter. However, he was of the view that, as with academic research, due and appropriate acknowledgement of the use of folklore or traditional knowledge should be mandatory.

The next meeting took place at the National Resources Conservation Authority (NRCA). Present were: Ms. Cordia Thompson, Biodiversity Planning Assistant; Dr. Audia Barnett, National Commission on Science and Technology; Ms. Yvette Strong, NRCA; Ms. Donna Black, Ministry of Environment and Housing; Ms. Una May Gordon, Team Leader, National Biodiversity Strategy Action Plan, Ms. Andrea Donaldson, Ms. Marcia Creary, and Ms. Carol Stephens, all of the NRCA; Mr. Andrew Woods, Scientific Research Council; and, Dr. Fisher.

WIPO learned of the initiatives of the NRCA to develop a strategy to implement the Convention on Biological Diversity, 1992. An interesting discussion was held on the meanings of the notions "traditional knowledge" and "indigenous knowledge." WIPO learned of a workshop on the Convention which took place in Jamaica in May, 1999 and included a session on intellectual property. The workshop had been organized by the NRCA in association with the Ministry of Environment and Housing, the Commonwealth Secretariat and the Foundation for International Environmental Law and Development (FIELD). The activities of the Scientific Research Council were also of interest. The Council has set up an "Innovators and Inventors Association", and a Natural Products Unit within the Council attempts to produce and commercialize products based upon natural resources. Also discussed were: technology transfer; the generally poor understanding of the intellectual property system and its benefits; prior informed consent experiences; and, the mooted development of access legislation.

The final meeting was held with Professor Ken Magnus, Professor Emeritus, Department of Chemistry, University of the West Indies. Mr. Bernard Jankee was also present. Professor Magnus spoke generally about the biodiverse-richness of Jamaica, and of the activities of the Department's Biotechnology Centre. He added that suitable and equitable agreements are needed between academic researchers and local communities.

The WIPO representatives departed Jamaica after the meeting with Professor Magnus.

ANNEX 5

Recommendations and Resolutions on the Protection of Expressions of Folklore

Resolution of the WIPO-UNESCO African Regional Consultation on the Protection of Expressions of Folklore*

Pretoria, March 23 to 25, 1999

Introduction

The African Regional Consultation on the Protection of Expressions of Folklore, organized by WIPO and UNESCO in cooperation with the Department of Trade and Industry of the Republic of South Africa, was held in Pretoria from March 23 to 25, 1999. The opening ceremony was addressed by Mr. MacDonald Netshitenzhe, Registrar of Patents, Trademarks, Designs and Copyright; Mr. Richard Owens, Director, Global Intellectual Property Issues Division, WIPO; and Mr. Salah Abada, Chief, Copyright and Creativity Section, UNESCO.

Participants at the Consultation were drawn from the Republic of South Africa, Benin, Botswana, Burkina Faso, Côte d'Ivoire, Ghana, Kenya, Malawi, Mali, Mauritius, Mozambique, Namibia, Nigeria, Senegal, Tanzania, Togo, Uganda, Zambia, and from the following intergovernmental organizations; African Regional Intellectual Property Organization (ARIPO), Organisation Africaine de la Propriete Intellectuelle (OAPI), and the Secretariat of the South African Development Community (SADC).

Resource persons were from Ghana, Kenya, South Africa and Tunisia. Delegates presented country reports on the experiences in their countries concerning the protection of expressions of folklore.

Preamble

Having listened to the introductory remarks which detailed the work on protection of expressions of folklore already undertaken by UNESCO and WIPO, the presentations of the resource persons, the country reports and ensuing discussions,

Considering that folklore as a manifestation of intellectual creativity deserves to be accorded legal protection as is provided to other forms of intellectual property,

Aware of the fact that protection of folklore is indispensable for the development, perpetuation and dissemination of cultural heritage,

---

* Organized by the World Intellectual Property Organization (WIPO) in cooperation with the United Nations Educational, Scientific and Cultural Organization (UNESCO) with the assistance of the Government of the Republic of South Africa

Noting the serious damage to the integrity of folklore in Africa occasioned by technology and the forces of modernization,

Recognizing the important potential role that expressions of folklore play in the socio-economic and cultural development of the African continent,

Considering that this potential is not being realized,

Noting that legal protection of expressions of folklore is provided under national copyright laws of several African countries,

Recognizing that UNESCO and WIPO have made significant efforts to promote the adequate and effective protection of expressions of folklore,

Noting that at present there is no regional or international regime for the legal protection of expressions of folklore,

Noting that adequate and effective protection of expressions of folklore at national level may require a *sui generis* form of legal protection, and that the model provisions developed by UNESCO and WIPO in 1982 provide an appropriate framework for further work,

Considering that the lack of legal protection of expressions of folklore at regional level and beyond is detrimental to the preservation and maintenance of the integrity of expressions of folklore,

Noting that current efforts at national, regional and international levels should be strengthened to achieve positive results for the protection and preservation of folklore,

Considering the urgent need for identification, documentation and conservation of expressions of folklore,

Considering that WIPO and UNESCO stand ready to assist developing countries in the protection of expressions of folklore in the framework of their respective programs,

Recommend As Follows

To African States:

That as a matter of urgency expressions of folklore should receive appropriate protection at national level, in order that African peoples derive the maximum socio-economic benefits from such protection.

That appropriate national structures should be put in place to ensure the regulation, coordination and protection of expressions of folklore, as a strategy for cultural development.

That African Governments devote more attention and resources to folklore issues and to intellectual property generally, and involve relevant communities and civil society in raising awareness of the value of expressions of folklore and the importance of protecting them.

That all African States evaluate measures for the protection of traditional culture and expressions of folklore in their respective national legislation, for adaptation or amendment where necessary.

That the adaptation of existing legislation and adoption of specific legislative texts for the protection of expressions of folklore should take into account the model provisions developed by UNESCO and WIPO. That the attention of African States be drawn to the urgency of creating an African regional framework for the preservation, protection and maintenance of the integrity of folklore, including the establishment of national and regional documentation centers.

To WIPO and UNESCO:

That WIPO, UNESCO, and other relevant intergovernmental organizations intensify their collaboration and offer increased assistance to developing countries in the form of:
- legal and technical assistance,
- specialized training in identification, documentation and conservation of folklore,
- provision of necessary equipment and other financial resources.

That WIPO and UNESCO increase budgetary resources for African countries in order to ensure the effective protection of expressions of folklore.

That WIPO and UNESCO assist African States in initiating appropriate measures to intensify intra-and inter-regional cooperation in respect of protection of expressions of folklore (for example, SADC countries, ECOWAS).

That work towards the protection of expressions of folklore and of traditional knowledge should be undertaken in parallel, taking into account the common elements, as well as the distinct characteristics and social functions of each.

That WIPO and UNESCO increase their efforts to develop, in the shortest possible time, a broad consensus among States in favor of an adequate and effective international regime for protection of expressions of folklore.

Appreciation

Participants express their gratitude to the Government of the Republic of South Africa, to WIPO, and to UNESCO, for organizing the Consultation, and for their continued assistance to African countries in particular, and to developing countries in general.

Recommendations of the WIPO-UNESCO Regional Consultation on the Protection of Expressions of Folklore for Countires of Asia and the Pacific*

Hanoi, 21 to 23 April 1999

The WIPO-UNESCO Regional Consultation on the Protection of Expressions of Folklore for Countries of Asia and the Pacific was organized in Hanoi from April 21 to 23, 1999 with the cooperation of the Government of Viet Nam. Representatives from 15 countries, namely Bangladesh, Brunei Darussalam, China, Fiji, India, Indonesia, Japan, Mongolia, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, and Viet Nam were present at the consultation meeting. In addition facilitators from six countries as well as four non-governmental organizations from the Region were present at the Consultation.

The Opening Session was addressed by the Deputy Minister of Culture and Information, Government of Viet Nam, Mr. Nguyen Trung Kien. Mr. Salah Abada, Chief, Creativity and Copyright Section of UNESCO, and Mr. Richard Owens, Director, Global Intellectual Property Issues Division of WIPO addressed the audience and spoke about the relevance of folklore and its protection for the countries of the region.

The subsequent sessions were devoted to topics like Practical Perspectives on the Preservation, Conservation, and Protection of Folklore; Options for the Legal Protection of Expressions of Folklore at National, Regional and International Levels; National Experiences with the Protection of Expressions of Folklore; The WIPO-UNESCO Model Provisions FOR National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions ,1982 (the Model Provisions); International Developments Towards the Protection of Traditional Knowledge; Use of the Existing Intellectual Property System to Protect Folklore; Initiatives for the Identification, Documentation, Protection and Use of Folklore in Australia and the Philippines.

The discussions were very stimulating and the interactions intensive. During the deliberations the consultation meeting noted the following points:

1. The countries of Asia and the Pacific region are very rich in their cultural heritage, including, but not limited to, folk-literature, folk arts and crafts, music, visual arts, ceremonies, folk-beliefs, folk-architecture associated with particular sites, as well as forms of traditional knowledge related to folk-medicines and folk-medical practices, agriculture, and conservation and sustainable use of biological diversity.

2. There is widespread unfair exploitation of the cultural heritage of these nations for commercial and business interests.

3. Important elements of traditional knowledge and folklore are being lost and will continue to be lost in the absence of a proper legal protection mechanism at national and international levels.

4. The existing Intellectual Property Rights (IPR) regimes are inadequate to address all of the issues involved in protection of traditional knowledge and folklore.

5. The initiative taken by the Republic of the Philippines in enacting the Indigenous Peoples Rights Act of 1997 RAA 8371 is commendable and provides useful guidance for further work in addressing the protection of traditional knowledge and folklore.

---

* Organized by the World Intellectual Property Organization (WIPO) in cooperation with the United Nations Educational, Scientific and Cultural Organization (UNESCO) with the assistance of the Government of Viet Nam

6. The leading role played by WIPO and UNESCO in offering a set of the Model Provisions for the purpose of protecting expressions of folklore, has been commendable.

7. Effective protection of traditional knowledge and folklore at national and international levels requires *sui generis* legislation. The Model Provisions provide an appropriate starting point, but further work is required to take into account the technological, legal, social, cultural and commercial developments which have taken place since the Model Provisions were concluded, and to examine the scope of subject matter coverage of folklore. Such work should take into account the common elements and distinct characteristics of traditional knowledge and folklore, in order to evaluate whether protection for both forms of cultural heritage can effectively be provided under a single legislative framework, or whether work on each should proceed separately but with equal urgency and commitment.

8. It is imperative for governments to devote greater attention and resources to the aspects of preservation, conservation, documentation, development and legal protection of traditional knowledge and folklore, and also for ensuring the safety and security of the materials and documents so collected to prevent unfair exploitation.

9. It is imperative for governments to devote greater attention and resources to support communities who are responsible for the creation, maintenance, custodianship and development of traditional knowledge and folklore.

10. There is a need to raise the level of awareness about the desirability of having a legal mechanism at the national level through dissemination of information to the public through mass media, debates, discussions, studies with experts and all interested groups. This is necessary for the benefit of policy makers, government functionaries and judiciary, social activists, academics and experts, and the general public, to ensure their active and meaningful participation in the process of national consensus building.

11. Institutional consultation and cooperation are essential for the nations in the region to develop a regional approach to the protection of traditional knowledge and folklore.

12. There is a need for vigorous consultation through formal consultative processes at international level to bridge the gaps in the perceptions of traditional knowledge and folklore and their protection, as viewed by the developing and developed countries.

In view of the above, the consultation meeting made the following recommendations:

To the Governments of Asia and the Pacific Region:

1. The nations of the Asia-Pacific region need to devote greater attention and resources to the issues of legal protection of traditional knowledge and folklore.

2. There is a need to initiate wide-ranging discussions with various experts on traditional knowledge and folklore, societies responsible for creating resources of traditional knowledge and folklore, academics, social activists and other interested groups to identify essential aspects of an action plan, aiming, ultimately, at the formulation of a legal mechanism for protection of traditional knowledge and folklore at national and international levels.

3. Nations of the region should cooperate to find solutions to problems of common concern and also to develop strategies, at regional level, for exercise and management of rights in traditional knowledge and folklore, and to support communities which are responsible for the creation, maintenance, custodianship and development of such traditional knowledge and folklore.

To WIPO/UNESCO:

1. Extend cooperation and support for national initiatives for awareness-building including through discussion, debates, seminars.

2. Institute studies and projects for in-depth study of these issues relating to protection of folklore and traditional knowledge.

3. Initiate steps for development of a *sui generis* form of binding legal protection at national and international levels for the protection of traditional knowledge and folklore, taking into account the technological, legal, social, cultural and commercial developments which have taken place since the Model Provisions were concluded.

4. Establish a Standing Committee on Traditional Knowledge and Folklore within both WIPO and UNESCO to facilitate the process of establishing legal protection of folklore and traditional knowledge. The Standing Committee will, *inter alia*, implement Recommendation 3 above, and facilitate and fund intra- and inter-regional consultation on the protection of traditional knowledge and folklore.

5. Increase WIPO-UNESCO cooperation in providing assistance to developing countries in the form of:
   - legal and technical assistance,
   - specialized training in identification, documentation and conservation of folklore and traditional knowledge
   - provision of necessary equipment and other financial resources.

All the participants wholeheartedly expressed their sincere appreciation to the Government of Viet Nam, in particular the Copyright Office of Viet Nam within the Ministry of Culture and Information, for extending their cooperation for the successful organization of the Consultation Meeting. The delegates and other participants thanked the Chairman of the Meeting, Dr. S. Samarasinghe (of Sri Lanka) for his excellent guidance and leadership during the proceedings. In addition, the delegates and other participants expressed their sincere gratitude to WIPO and UNESCO profusely for organizing this meeting and also for the assistance they offered to the countries of Asia and the Pacific on various issues.

Recommendations of the WIPO-UNESCO Regional Consultation on the Protection of Expressions of Folklore for Arab Countries*

Tunis, 25 to 27 May, 1999

The World Intellectual Property Organization (WIPO) and the United Nations Educational, Scientific and cultural Organization (UNESCO) organized on May 25 to 27, 1999 in Tunis, the Regional Consultation for Arab countries on the Protection of Expressions of Folklore, in cooperation with the Ministry of Culture of the Republic of Tunisia.

The meeting was opened by Dr. Abdul Baki El Harmassi, Minister of Culture of the Republic of Tunisia, Mr. Salah Abada, Chief, Copyright and Creativity Section and representative of Dr. Frederico Mayor, the Director General of UNESCO and Mr. Richard Owens, Director of the Division of Global Intellectual Property Issues, and representative of Dr. Kamil Idris, the Director General of WIPO.

Delegations from Algeria, the National Palestinian Authority, Egypt, Jordan, Kuwait, Lebanon, Libya, Morocco, Mauritania, the Sultanate of Oman, the Sudan, Tunisia and Yemen participated in the meeting and presented reports on their countries' experience in respect of the protection of the expressions of Folklore.

Lecturers from Egypt, Jordan, the Sultanate of Oman, Tunisia and the Folklore Center of the Arab Gulf Countries attended the meeting.

The introductory speeches on the protection of expressions of folklore were presented by UNESCO and WIPO and followed by other lectures. The participants took note of the experience of various delegations. Following constructive and serious discussions, the meeting made the observations and recommendations below:

Observations

1. Arab countries are rich with one of the most precious cultural and civilizational heritage in the world which constitutes an important pillar for human civilization and an integral part of the world patrimony.
2. Arab folklore (Arab popular heritage) is a strong means of bringing together the Arab peoples. However, this common aspect does not exclude, nor does it diminish, the importance of the local variations specific to each people.
3. Arab folklore (Arab popular heritage) and traditional knowledge are subject to various dangers, including negligence, disappearance, piracy, mutilation and illegal exploitation.
4. Arab folklore (Arab popular heritage) and traditional knowledge are intellectual property resources important to Arab countries in particular and developing countries in general. Therefore, there is a need for a thorough study as well as the provision of legal protection at national, regional and international levels.
5. WIPO and UNESCO devote all the necessary efforts to set the appropriate legal framework for the protection and preservation of expressions of folklore.
6. Currently, there is not a legal framework for the protection of expressions of folklore at both national and international levels.

---

* Organized by the World Intellectual Property Organization (WIPO)November 29, 1999in cooperation with the United Nations Educational, Scientific and Cultural Organization (UNESCO), with the assistance of the Government of Tunisia

7. The protection of expressions of folklore at the national level is important. The meeting considers that WIPO-UNESCO Model Provisions for National Laws on the Protection of Expressions of Folklore from Illegal Exploitation and Other Prejudicial Actions, 1982 (the Model Provisions) are a relevant groundwork for protection, preservation, and conservation.

8. The collection, documentation, conservation and dissemination of expressions of folklore are necessary to ensure the means of protection.

9. UNESCO and WIPO have the capacity, through their programs, to provide assistance to Arab and developing countries.

Recommendations

To Arab Countries:

1. Arab countries should create specialized institutions or centers as a national and cultural necessity for the collection, classification, conservation, documentation and dissemination of folklore (Arab popular heritage) and develop a specialized environment.

2. Arab countries should include among their priorities working together on their national legislation for the provision of measures aiming at the protection of expressions of folklore. Such protection would have positive implications on development and economy.

3. Each Arab country should prepare an open list of expressions of folklore and traditional knowledge the preservation and protection of which are considered necessary.

4. Arab countries should rely, when reviewing and amending their legislation, on the model provisions set, as adapted to recent developments in the field.

To International Organizations:

The meeting calls upon WIPO, UNESCO and the specialized international organizations to intensify their efforts in order to provide greater assistance to Arab countries in particular and developing countries in general by:

1. providing technical and legal cooperation to Arab countries;

2. providing training to officers in the field of collection, classification, conservation, documentation and dissemination of expressions of folklore;

3. providing technical equipment and material support;

4. Assisting Arab countries in the creation of national centers specialized in the conservation of expressions of folklore, strengthening such existing centers and creating a pilot regional center for the conservation, documentation and promotion of expressions of folklore by granting the expected protection and training of officers responsible for its management;

5. elaborating an international convention on the protection of expressions of folklore;

6. establishing a standing committee on expressions of folklore and traditional knowledge in both WIPO and UNESCO.

Conclusion

The participants in the meeting expressed their grateful thanks and appreciation to the Tunisian Government represented by the Ministry of culture and the Tunisian Institution for the Protection of Copyright, their hospitality and organization that contributed to the success of the meeting.

They also thanked WIPO and UNESCO for their ongoing efforts for the benefit of Arab countries in particular and developing countries in general.

Recommendations of the WIPO-UNESCO Regional Consultation on the Protection of Expressions of Folklore for Latin America and the Caribbean*

Quito, June 14 to 16, 1999

Representatives of Bolivia, Brazil, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, Guatemala, Haiti, Jamaica, Mexico, Nicaragua, Panama, Peru, Suriname, Trinidad and Tobago and Venezuela, and also representatives of the Caribbean Community Secretariat (CARICOM), the Permanent Secretariat of the General Treaty on Central American Economic Integration (SIECA) and the General Secretariat of the Andean Community, met in Quito, Ecuador, from June 14 to 16, 1999, under the auspices of the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the World Intellectual Property Organization (WIPO), to discuss matters concerning the protection of expressions of folklore (which can relate to popular culture, traditional culture and traditional knowledge).

At the start of the meeting the delegates elected the Attorney, Nelson Velasco, President of the Ecuadorian Institute of Intellectual Property, as Chairman.

Experts from Mexico, Peru, Trinidad and Tobago and Venezuela made presentations on practical aspects, legal options and national initiatives in connection with the perpetuation, preservation and protection of expressions of folklore in Latin American and Caribbean countries, as provided in the program for the Regional Consultation.

The delegations made presentations on the position in their countries and subregions regarding the identification, documentation, dissemination and protection of their expressions of folklore.

After a wide-ranging debate, the delegations,

Considering:

That expressions of folklore are basic elements of national identity,

That Latin America and the Caribbean is a region with a wealth of expressions of folklore that form part of its cultural identity,

That there is ever-greater international recognition of the socio-economic value of expressions of folklore, and also growing commercial exploitation thereof,

That the situation in Latin America and the Caribbean is complex and diverse with respect to experience and the extent of, and resources available for, the protection of expressions of folklore,

That the momentum of globalization exposes expressions of folklore to a greater degree of distortion and misuse that is detrimental to national identity,

---

* Organized by the World Intellectual Property Organization (WIPO) in cooperation with the United Nations Educational, Scientific and Cultural Organization (UNESCO), with the assistance of the Government of Ecuador

That the ever-greater development of the technology of communication media and technology in general represent both opportunities and also new challenges for expressions of folklore which necessitate the introduction of strategies and means of adequate protection to ensure that cultural diversity is maintained,

That the measures for the perpetuation, preservation and protection of expressions of folklore hitherto undertaken in the various countries of the region do not afford sufficient protection against distortion and misuse and the eventual disappearance of expressions of folklore,

That greater protection has various aspects, which may be subregional, regional and international as well as national, and that it is necessary to work in those different areas,

That the pioneering work of UNESCO and WIPO has contributed to greater awareness on the part of individual countries and to a strengthening of the protection of expressions of folklore;

Recommend:

That countries should promote the creation or strengthening, as the case may be, of national, sub-regional, regional and international legislation on the protection of expressions of folklore;

That UNESCO and WIPO should make the necessary legal-technical assistance and financial cooperation and experience available to Latin American and Caribbean countries to start, or where appropriate continue, their work of identifying, documenting, uniformly classifying, perpetuating, preserving and disseminating expressions of folklore;

That UNESCO and WIPO should provide assistance or cooperation with a view to heightening awareness and recognition of the importance of expressions of folklore and their protection by all segments of society;

That UNESCO and WIPO should continue their work of nurturing expressions of folklore and their protection at the international level, and that, to the same end, a Standing Committee should be created within WIPO to study and implement means of strengthening that protection, taking due account of the similarities and differences between traditional knowledge and other expressions of folklore;

That UNESCO and WIPO should carry out pilot projects in Latin America and the Caribbean in connection with the management of expressions of folklore.

The delegates expressed their appreciation of the hospitality shown by the Government of Ecuador in acting as host to the Regional Consultation, and also of the support provided by UNESCO and WIPO.

ANNEX 6

List of States, Organizations and Persons Submitting Formal Comments on the Draft Report

I. States

Country	Agency	Person & Title
Canada	Permanent Mission of Canada to the United Nations and Other International Organizations in Geneva	
Ecuador	The General Directorate of International Economic Negotiations of Ecuador	
Gabon	The General Directorate of Industrial Development, Ministry of Trade and Industrial Development	Mr. Malem Tidzani, Director General
Kenya	Kenya Industrial Property Office (KIPO), Ministry of Tourism, Trade & Industry	Professor Norah K. Olembo, Director
New Zealand	Permanent Mission of New Zealand to the United Nations and Other International Organizations in Geneva	
Peru	Tribunal for Intellectual Property and Free Competition (INDECOPI)	Dr. Ana Maria Pacon, Chairman of the Tribunal for Intellectual Property and Free Competition and, Eng. Victor Revilla, Vice President, Intellectual Property Tribunal
United States of America	Office of Legislation and International Affairs, United States Patent and Trademark Office (USPTO)	Mr. Nicholas P. Godici, Acting Under Secretary of Commerce for Intellectual Property and Acting Director of USPTO

II. Intergovernmental Organizations

Organization	Person & Title
The Regional Office for the Western Pacific The World Health Organization (WHO)	Mr. Wu Guogao, External Relations Officer

III. Non-Governmental Organizations

Organization	Person & Title
Alumni Association of Natural Medicine Practitioners Inc. (AANMP), Queensland, Australia	Dr. Ross G. Mack, President
Arts Law Centre of Australia, New South Wales, Australia	Ms. Alison Davis, Legal Officer and, Ms. Delia Brown, Executive Director
Association for the Defense of Natural Rights (ADN), Lima, Peru	Mr. Brendan Tobin, Coordinator
Ecolomics International, Geneva, Switzerland	Mr. Urs P. Thomas, Research Associate
Future Harvest Centres/Consultative Group on International Agricultural Research (CGIAR)	Ms. Susan Bragdon, International Plant Genetic Resources Institute (IPGRI); Dr. M. S. Swaminathan, Chair, CGIAR Genetic Resources Policy Committee; Dr. Geoffrey Hawtin, Director General, IPGRI
Gaia Foundation, London, United Kingdom	Ms. Liz Hosken and Ms. Emma Irwin
Indigenous Peoples' Secretariat, Copenhagen, Denmark	Mr. Erik Gant, Technical Advisor
International Center for Technology Assessment	Mr. Peter DiMauro, Staff Patent Analyst
International Federation of Industrial Property Attorneys (FICPI)	
International Publishers Association, Geneva, Switzerland	Mr. Benoît Müller, Secretary General
South African San Institute	Mr. Roger Chennells, Legal Advisor

IV. Individuals

Aalbersberg, Bill
University of the South Pacific,
Suva, Fiji

Anderson, Jane
PH.D Student, School of Law,
University of New South Wales,
New South Wales, Australia

Bernard, Penny
Professor, Anthropology Department
Rhodes University,
Eastern Cape Province, South Africa

Brassieur, Ray

Chon, Margaret
Associate Professor of Law
Seattle University School of Law,
United States of America

Ghosh, Shubha
Visiting Professor of Law
University at Buffalo, SUNY,
United States of America

Dutfield, Graham
Researcher, Oxford Centre for the Environment,
Ethics and Society Oxford,
United Kingdom

Fall, Aboubacar
Advocate
Dakar, Sénégal

Hirst, Manton
South Africa

Joshi, V.K.
Reader and Ex. Head, Dravyaguna Department,
Faculty of Ayurveda, Institute of Medical Sciences,
Banaras Hindu University, Varanasi, India

Kabatesi, Donna
Director,
Traditional and Modern Health Practitioners
Together Against AIDS (THETA),
Kampala, Uganda

Ling, Hua
China

Mbah, Ateng, Rose
General Coordinator,
Rural Women Environmental Protection
Association (RWEPA),
North West Province, Cameroon

Mohamed, Aisha
Researcher,
Wednet Research Network,
Sudan

Morrow, WSP
South Australia, Australia

Palethorpe, Stephen
Visiting Fellow,
Faculty of Law, Australian National University,
Australian Capital Territory, Australia

Shidore, Sukumar
Mumbai, India

Thomas, Urs P.
Geneva, Switzerland

ANNEX 7

Bibliography

Books and Articles

Al-Fuhail, Isma'il A. and Al-Hamdan, Amna Rashed, *Birth Customs in the United Arab Emirates, Qatar, Kuwait* (The G.C.C. Folklore Center, Doha, 1998)

Allen, R. C., "Collective Invention", (1983) *Journal of Economic Behaviour and Organization* 4(1), p. 1

Australian Copyright Council (ACC), *Protecting Indigenous Intellectual Property: A Discussion Paper* (ACC, Redfern, 1998)

Blakeney, M., "Biodiversity Rights and Traditional Resource Rights of Indigenous Peoples" *European Intellectual Property Review (EIPR)* 2 (1998)

Blakeney, M., "The Protection of Traditional Knowledge Under Intellectual Property Law" *European Intellectual Property Review (EIPR)* 6 (2000)

Boyle, J., *Of Shamans, Software and Spleens* (Harvard University Press, Cambridge, Mass. and London, 1996)

Brown, M., "Can Culture be Copyrighted?", 49, 2, (1998) *Current Anthropology*

Brush, S. and Stabinsky, D., (Eds.) "Indigenous Knowledge of Biological Resources and Intellectual Property Rights: The Role of Anthropology" (1993) 95 *American Anthropologist* p. 653

Brush, S. and Stabinsky, D., (Eds.) *Valuing Local Knowledge: Indigenous People and Intellectual Property Rights* (Island Press, Washington, D.C and Covelo, CA, 1996)

Caparas, O., Lim, V., and Vargas, N., "Handicrafts and folkcrafts industries in the Philippines: their social-cultural and economic contexts" *SPAFA Journal* (1992 Jan 1; Vol. 2)

Chand V. S., *et al.*, "Contracts for 'Compensating' Creativity: Framework for Using Market and Non-Market Instruments for Rewarding Grassroots Creativity and Innovation", Paper prepared for Forum Belem: Paths of Sustainable Development, November 1996

Chand, V. S., *et.al*, "Farmers' Innovations for Sustainable Resource Management and Conservation of Biological Diversity", in Fadani, A. and Heidhues, F. (Eds.), *Food Security and Innovations. Successes and Lessons Learned* (Peter Lang, Frankfurt, 1997)

Chhatre, A. *et. al.*, *Srishtigyaan. A Methodology Manual for People's Biodiversity Registers* (Indian Institute of Science, Bangalore, 1998)

Conley, J.C. and O'Barr, W. "Rules vs. Relationships" *The Ethnography of Legal Discourse*. (University of Chicago Press)

Correa, C. M., "Elements for the Protection of Farmers' Plant Varieties" (Cottier, Thomas and Mavroidis, Petros, Berne)

Crucible Group, *Seeding Solutions*, Volumes 1rand 2 (IPGRI, IDRC and Dag Hammarskjold Foundation, 2000 and 2001)

Downes, D.,"How Intellectual Property Could Be a Tool to Protect Traditional Knowledge",(2000) 25 *Columbia Journal of Environmental Law,* 253

Drahos, P., "Indigenous Knowledge, Intellectual Property and Biopiracy: Is a Global Bio-collecting Society the Answer?" 6 (2000) *European Intellectual Property Review (EIPR)*, p. 245

Drescher, T. and Greene, C. S.,"The Tipi with Battle Pictures: The Kiowa Tradition of Intangible Property Rights", (1994) 84, 4 *Trademark Reporter*

Dutfield, G., *Can the TRIPs Agreement Protect Biological and Cultural Diversity*, 10, (Biopolicy International Series, 1997)

Dutfield, G., *Intellectual Property Rights, Trade and Biodiversity: Seeds and Plant Varieties* (IUCN and Earthscan Publications, London, 2000)

Dutfield, G., "The Public and Private Domains: Intellectual Property Rights in Traditional Knowledge" (2000), Vol. 1, No. 3, *Science Communication*

Folarin, S., "Conservation, Preservation and the Legal Protection of Folklore in Africa: A General Survey"

Girsberger, M., *Biodiversity and the Concept of Farmers' Rights in International Law* (Peter Lang, 1999)

Golvan, C, "Aboriginal Art and the Protection of Indigenous Cultural Rights", 7 (1992) *European Intellectual Property Review*

GRAIN, "Reclaiming Diversity, Restoring Livelihoods" *Seedling* (June 1999)

Greaves, T. (Ed.) *Indigenous Peoples and Intellectual Property Rights: A Sourcebook* (Society for Applied Anthropology, Oklahoma City, 1994)

Gupta, A. K., *Crops, Creativity and Compensation: Honey Bee Network Approach* (SRISTI, 1996)

Horton, C., "Protecting Biodiversity and Cultural Diversity Under Intellectual Property Law: Toward a New International System" (1995) 10 *J.Envtl. Law and Litigation*

Instituto de Investigaciones Económicas y Sociales (IDIES), "Aproximación al sistema jurídico maya", "Los procedimientos jurídicos en las comunidades mayas actuales", "La relación de las comunidades mayas actuales con el sistema oficial de justicia", and "Las normas jurídicas en las comunidades mayas actuales", *Reflexiones Jurídicas* (Universidad Rafael Landívar, Guatemala, 1998)

Irahim, B., "Evaluation of empirical studies on handicrafts and small-scale industrial activities in Sudan" *The Ahfad Journal* (1992 Jun 1; vol. 9 n 1(55))

Janke, T., "Our Culture, Our Future", draft Discussion Paper prepared for the Australian Institute of Aboriginal and Torres Strait Islander Studies and the Aboriginal and Torres Strait Islander Commission, 1997 (subsequently published in revised form in 1999)

Jaszi, P. and Woodmansee, M., "The Ethical Reaches of Authorship", (1996), 95 *The South Atlantic Quarterly*

Keitzman, R., "Bahraini wool-weavers to visit Jordan", *Bahrain Tribune* (18 August 1997)

Kerr, K., "The economic potential of handicrafts enterprises in rural development focus on Indonesia", Unasylva (1991; v 42 n. 165(31))

Kerry ten Kate, K. and Laird S. A., "Placing Access and Benefit Sharing in the Commercial Context: A Study of Private Sector Practices and Perspectives" (World Resources Institute & Royal Botanic Gardens, Kew, 1997)

Kietzman, R., "Palm Paper Papyrus - Hand Made in Bahrain", *Bahrain This Month* (date unknown)

Le Gall, S., "Preserving One's Narrative: Implications of Intellectual Property Protection of Folklore and the Steel Pan in Trinidad and Tobago", Master of Law Thesis, York University, Canada, (1994) Mahunnah, R.L.A. and Mshigeni, K.E., "Tanzania's Policy on Biodiversity Prospecting and Drug Discovery Programs", *Journal of Ethnopharmacology* 51 (1996)

Marrie, H., "The Convention on Biological Diversity, Intellectual Property Rights and the Protection of Traditional Ecological Knowledge", Masters Dissertation, Law School, Macquarie University, Australia, July 20, 1998

McDonald, I., *Protecting Indigenous Intellectual Property* (Australian Copyright Council, Sydney, 1998)

Miller, D., "Collective Ownership of Copyright in Spiritually-Sensitive Works" (1995) Nov 1, 6(4) *Australian Intellectual Property Journal* p.185

Mills, S. "Indigenous Music and the Law: An Analysis of National and International Legislation", (1996) *Yearbook for Traditional Music*, 57

Mossinghoff, G., "The Biodiversity Convention and Intellectual Property Rights: Conflict or Harmony?" (1998) Patent World

Mugabe, J., "Intellectual Property Protection and Traditional Knowledge", *Intellectual Property and Human Rights* (WIPO, 1999)

Nadim, A., "Traditional Arts and Crafts of Cairo", *Prism Series No. 3, Kalyoub* (Al-Ahram Commercial Press, 1998)

Nakashima, D., "Conceptualizing Nature: The Cultural Context of Resource Management", 34 (1998) *Nature Resources*, UNESCO

Pires de Carvalho, N, "From the Shaman's Hut to the Patent Office: How Long and Winding is the Road?", (1999) 40 *Revista da ABPI*, and (1999) 41 *Revista da ABPI*

Posey, D., "Protecting Indigenous Rights to Diversity" (1996) 38/3 *Environment* 7

Posey, D. and Dutfield, G., *Beyond Intellectual Property* (International Development Research Centre, Ottawa, 1996)

Rao, V.; Rao, C., and Muddileti, M. Problems of Handicrafts Co-operative societies in Andhra Pradesh. Kurukshetra, (1996 Mar 1; Vol. 44 Nr. 6(51)

Russell Bernard, H., *Research Methods in Cultural Anthropology*, (SAGE Publications, Inc., London, 1988)

Simpson, T., *Indigenous Heritage and Self-Determination* (IWGIA and the Forest Peoples Programme, Copenhagen, 1997)

Society for Research Into Sustainable Technologies and Institutions (SRISTI), *Saga of SRISTI's Search for Sustainable Solutions* (SRISTI, Ahmedabad (1997)

SRISTI, *SRISTI Initiatives for Conservation through Augmenting Creativity at Grassroots* (SRISTI, 1997)

Strauss, J., "The Biodiversity Convention and Intellectual Property" 24 *IIC* p. 602

Tomei, M. and Swepston, L., *Indigenous and Tribal Peoples: A Guide to ILO Convention No. 169* (International Labour Organization)

Tunney, J., "E.U., I.P., Indigenous People and the Digital Age: Intersecting Circles", 9 (1998) *European Intellectual Property Review* 335

Williams D., "Matauranga Maori and Taonga: The Nature and Extent of Treat Rights held by Iwi and Hapu in Indigenous Flora and fauna, Cultural Heritage Objects and Valued Traditional Knowledge", (January 1997)

WIPO, *Intellectual Property Reading Material* (WIPO Publication Number 476)

WIPO/UNESCO, *UNESCO-WIPO World Forum on the Protection of Folklore* (WIPO Publication Number 758/ UNESCO Publication Number CLT/CIC/98/1, 1998)

Yussof, A and Kasim, "A. Status of Malaysian handicrafts in social-cultural and economic development" *SPAFA Journal* (1992 May 1; Vol. 2 n 2(16))

Documents

Food and Agricultural Organization (FAO), "Revision of the International Undertaking on Plant Genetic Resources – Consolidated Negotiating Text Resulting from the Deliberations during the Fifth Extraordinary Session of the Commission on Genetic Resources for Food and Agriculture" (document *CGRFA/IUND/CNT/Rev.1*).

International Trade Centre (ITC)/United Nations Educational, Scientific and Cultural Organization (UNESCO) "Overview of Legal and Other Measures to Protect Original Crafts Items" (ITC/UNESCO, Paris and Geneva, 1996)

Pacific Concerns Resource Center, "Proceedings of the Indigenous Peoples' Knowledge and Intellectual Property Rights Consultation", Organized by the Pacific Concerns Resource Center, Suva, Fiji, April 24-27, 1995

Proceedings of South Pacific Forum, South Pacific Community/UNESCO Symposium on the Protection of Traditional Knowledge and Expressions of Indigenous Cultures (New Caledonia, February 15 to 19, 1999)

South Pacific Peoples Foundation, "Proceedings of the 15th Annual Networking Conference "Our Knowledge, Our Rights: Traditional Knowledge and Pacific Peoples", South Pacific Peoples Foundation, 1998

United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (the UNCCD) "Traditional Knowledge" (document ICCD/COP(3)/CST/2)

UNCCD Traditional Knowledge (documents ICCD/COP(4)/CST/2)

UNCTAD (document TD/B/COM.1/EM.13/2)

UNCTAD (document TD/B/COM.1/EM.13/3)

United Nations Environment Programme (UNEP)/Convention on Biological Diversity (CBD) "Traditional Knowledge And Biological Diversity" (Workshop On Traditional Knowledge And Biological Diversity; Madrid, Spain) (document UNEP/CBD/TKBD/1/2)

UNEP "The Impact Of Intellectual Property Rights Systems On The Conservation And Sustainable Use Of Biological Diversity And On The Equitable Sharing Of Benefits From Its Use" (document UNEP/CBD/COP/3/22)

UNEP "International Cooperation Among Indigenous And Local Communities (document UNEP/CBD/WG8j/1/4)

UNEP "Knowledge, Innovations and Practices of Indigenous and Local Communities" (document UNEP/CBD/SBSTTA/2/7)

UNEP "Legal And Other Appropriate Forms Of Protection For The Knowledge, Innovations And Practices Of Indigenous And Local Communities Embodying Traditional Lifestyles Relevant For The Conservation And Sustainable Use Of Biological Diversity" (document UNEP/CBD/WG8j/1/2)

UNEP, Report Of The Working Group On The Implementation Of Article 8(J) And Related Provisions (document UNEP/CBD/COP/5/5)

UNEP "Traditional Forest-Related Knowledge And The Convention On Biological Diversity" (document UNEP/CBD/SBSTTA/2/Inf.3)

United Nations, "Principles and Guidelines for the Protection of the Heritage of Indigenous People" (E/CN.4/Sub.2/1995/26)

World Health Organization (WHO), "Declaration of Alma-Ata" (International Conference on Primary Health Care, Alma-Ata, USSR) (WHO, Geneva, 1978)

WHO, "WHO Policy and Activities in the Field of Traditional Medicine" (Document WHO/TRM/96.2)

World Intellectual Property Organization (WIPO), "Intellectual Property and Genetic Resources" (Document WIPO/IP/GR/00/2)

WIPO, "Protection of Traditional Knowledge: A Global IP Issue" (Document WIPO/RT/LDC/14)

WIPO, Record of the WIPO Roundtable on Intellectual Property and Indigenous Peoples, Geneva, July 23 and 24, 1999

WIPO, Record of the WIPO Roundtable on Intellectual Property and Traditional Knowledge, Geneva, November 1 and 2, 1999

World Bank "Indigenous Knowledge for Development: A Framework for Action" (1998)

World Trade Organization (WTO), "Comments on legislation implementing the CBD, including the Andean Community's Common System on Access to Genetic Resources and the Biodiversity Law of Costa Rica" (document WT/CTE/W/125).

WTO, "The Convention on Biological Diversity and the Agreement on Trade-Related Aspects of IP Rights" (Document WT/CTE/W/50)

WTO, "Environment and TRIPS" (Document WT/CTE/W/8 and W/8/Corr.1)

WTO, "The Relationship Between the Convention on Biological Diversity (CBD) and the Agreement on Trade-Related Aspects of IP Rights (TRIPS); with a Focus on Article 27.3(b)" (document WT/CTE/W/125)

Conventions and Other International Instruments

Agreement on Trade Related Aspects of Intellectual Property Rights (the TRIPS Agreement), 1994

Berne Convention for the Protection of Literary and Artistic Works, 1971

Convention Concerning Indigenous Peoples in Independent Countries, 1986

Convention Establishing the World Intellectual Property Organization, 1967

Convention for the Protection of Cultural Property in the Event of Armed Conflict, 1954

Convention on Biological Diversity, 1992

Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property, 1970

Hague Agreement Concerning the International Registration of Industrial Designs, 1925

International Convention for the Protection of Performers, the Producers of Phonograms and Broadcasting Organizations, 1961

International Convention on the Protection of New Varieties of Plants, 1991 (UPOV Convention)

Madrid Agreement Concerning the International Registration of Marks, 1891 and the Protocol Relating to that Agreement, 1989

Paris Convention for the Protection of Industrial Property, 1883

Patent Cooperation Treaty, 1970

Recommendation for the Protection of Movable Cultural Property, 1964

United Nations Convention to Combat Desertification in Countries Experiencing

Serious Drought and/or Desertification, Particularly in Africa, 1994

UNESCO-WIPO Model Provisions for National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions, 1982

Reports

Canada's Aboriginal Action Plan, entitled *Gathering Strength*, based on *the Report of the Canadian Royal Commission of Aboriginal Peoples (ARCAP)*

Committee of Inquiry into Folklife in Australia, "Folklife: Our Living Heritage", (1987)

Karnataka Planning Board, *Report of the Karnataka Planning Board. Subgroup on Biodiversity* (1996)

Report of the First Meeting of the Working Group on Intellectual Property Rights, organized by the South Pacific Commission (SPC) and the Pacific Regional Agricultural Programme (PRAP), Suva, Fiji, May 5-7, 1997

Report on the Official Insignia of Native American Tribes, USPTO (September 30, 1999)

Declarations

Draft United Nations Declaration on the Rights of Indigenous Peoples, August 26, 1994 (E/CN.4/1995/2; E/CN.4/Sub.2/1994/56)

Julayinbul Statement on Indigenous Intellectual Property Rights, 1993

Kari-Oca Declaration and Indigenous Peoples Earth Charter, 1992

Mataatua Declaration on Cultural and Intellectual Property Rights of Indigenous Peoples, 1992

Papers, Submissions and Other Materials

Downes, D. "Using Intellectual Property as a Tool to Protect Traditional Knowledge: Recommendations for Next Steps", Draft CIEL Discussion Paper prepared for the Convention on Biological Diversity Workshop on Traditional Knowledge, (November 1997)

Farquhar S., "Certification and Authentication Trade Marks and Industrial Property Protection of Arts and Cultural Expression", paper presented at the International Conference on Artistic and Cultural Expressions, Traditional Knowledge, and Protection of Heritage, September 27-29, 1996, University of Queensland, Australia

Gray, S., "Recognizing Aboriginal Intellectual Property" (unpublished paper)

Peturu, C., "Indigenous Peoples' Knowledge and Intellectual Property Rights in Relation to the Kava Plant" (Unpublished paper)

Preston P., "The 1989 UNESCO Recommendation and Aboriginal and Torres Strait Islander Peoples' Intellectual Property Rights" (Paper submitted by the Indigenous Cultural and Intellectual Property Task Force at UNESCO/Smithsonian Conference "A Global Assessment of the 1989 Recommendation on the Safeguarding of Traditional Culture and Folklore", Washington, June 27-30, 1999)

Research Foundation for Science, Technology and Ecology, "Model Biodiversity Related Community Intellectual Rights Act" (1997)

Rural Advancement Foundation International (RAFI), "Intellectual Integrity Framework" (1994)

Solomon, M., "Maori Cultural and Intellectual Property Claim: WAI 262" (unpublished paper)

Solomon, M., "Understanding Indigenous Cultural and Intellectual Property Rights: Implications for Environmental Risk Management", Paper Presented at Conference on Environmental Risk Management, Auckland, New Zealand, June, 1998

Third World Network, "A Conceptual Framework and Essential Elements of a Rights Regime for the Protection of Indigenous Rights and Biodiversity" (1996)

For more information contact the
World Intellectual Property Organization at:

Address:
34, chemin des Colombettes
P.O. Box 18
CH-1211 Geneva 20
Switzerland

Telephone:
41 22 338 91 11

Fax:
41 22 733 54 28

e-mail:
wipo.mail@wipo.int

or its New York Coordination Office at:

Address:
2, United Nations Plaza
Suite 2525
New York, N.Y. 10017
United States of America

Telephone:
1 212 963 6813

Fax:
1 212 963 4801

e-mail:
wipo@un.org

Visit the WIPO website at:
http://www.wipo.int

and the WIPO Electronic Bookshop at
http://www.wipo.int/ebookshop

BEST COPY AVAILABLE

WIPO Publication No. 768E *ISBN 92-805-0968-3*